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PRURITUS ANI

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Pruritus ani is a distressing malady and as long ago as 1911 Wallis[1] wrote that the patients 'look older than their age and their general view of life is a weary one.' The management of these cases is often unsatisfactory because they are delegated to inexperienced juniors, who prescribe ointment which aggravates the pruritus, and give bland advice about not scratching, which aggravates the patient.

While at one time the province of the dermatologist, pruritus ani is now rightly being dealt with by those especially interested in rectal surgery. Much has been written on the subject of pruritus ani and many treatments suggested for which there can be little justification. It is necessary that a systematic approach be made to the subject in the same way as to any other medical or surgical entity, viz. a full history and a detailed examination. These notes are an attempt to do this and to consider the scope of the various forms of treatment.

There are conditions which may initiate the pruritus, and still others which may be super-added later. In some cases, the secondary causes may keep up the irritation after the primary cause has ceased to operate. It is not convenient, however, to classify causes as primary and secondary, because what may be primary in one patient may be secondary in another and *vice versa*.

The following is a list of conditions which may cause pruritus ani:—

1. General conditions.
2. Psychogenic conditions.
3. Allergy.
4. Fungus infections.
5. Bowel habit disturbances.
6. Clothing.
7. Diet.
8. Local rectal conditions.
9. Idiopathic causes.

The one important secondary factor in all cases is the additional irritation associated with scratching and secondary infection.

The history and examination will be conducted with a view to eliciting these conditions.

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HISTORY

(A) *General.* It is important to enquire for a history of diabetes and in every case the urine should be examined. Other medical conditions causing pruritus, such as Hodgkins' disease, must also be remembered. Pruritus ani may also be associated with the menopause, on the same basis as kraurosis vulvae. There may be an allergic background and other allergic disturbances should be asked for carefully.

True allergic pruritus is definitely rare although articles have been written tending to give a contrary impression. Swinton[2] has found that the mercury in surgical lubricants and the phenolphthalein in laxatives may be irritating factors and these should be enquired for. The dermatitis following the application of ointments, especially those containing anaesthetics, is an important aggravating factor in many cases and when this is superimposed on a pre-existing pruritus, the condition is much more difficult to diagnose than when it occurs on normal skin. Highly seasoned foods such as curries are sometimes secondary factors, as also are excess of carbohydrate in the diet, and over-indulgence in smoking and drinking. Psychogenic episodes, incidents causing tension and fatigue, may well influence the course of pruritus ani and an attempt should be made to assess these. It is interesting, on questioning these patients, to discover what a substantial effect the pruritus ultimately exerts on them in terms of their life at home and their working capacity. Pruritus is an embarrassing malady, and can hardly be discussed at work or socially with the relish of many other diseases. It has to be sublimated continually and even when the weary sufferer reaches bed and the hope of temporary oblivion, it is instead to be subjected to an increased torment of irritation.

(B) *Rectal.* The general rectal history will indicate associated rectal pathology such as piles, fissure, procto-colitis and tumours, from the simple prolapsing adenomatous polyp to the skulking carcinoma. These conditions must never be overlooked, although

their incidence is probably no higher in pruritics than among the population at large. Regularity of bowel habit should be enquired for, as a normal motion passed without delay or tenesmus will be less irritating than either scyballous masses on the one hand, or aperient-liquefied faeces on the other. Aperients *per se* may be irritating, and the question of their abuse should be examined. A history of worms is also important. The use of rough, inferior toilet paper and strong antiseptic soaps may be aggravating factors. Rough, scratchy underclothing, too, may be responsible, from its direct mechanical effect, from its insulating action which promotes sweating and from the hypersensitivity which certain patients may have to special materials such as wool.

EXAMINATION

(A) *General.* General examination is important, as in some cases the pruritus may be symptomatic of systemic disease such as diabetes, uraemia and Hodgkins' disease. Apart from these, according to Rugery[3], anaemia and general debility may predispose, and McCutchan[4] suggests a nicotinic acid deficiency where diet is faulty. The general state of the skin is important. Fungus infection of the perianal region is by no means rare and it is essential to seek in the groins and in between the toes for confirmatory evidence. Occasionally pruritus ani may be associated with other skin conditions, e.g. seborrhoea, psoriasis and eczema, but this is rare. Far more important is the general question of cleanliness and sweatiness as both of these are often aggravating factors.

(B) *Local.* The routine examination for any rectal complaint must be carefully carried out, with inspection, digital examination and passage of both proctoscope and sigmoidoscope. Some authorities recommend a barium enema as well. It is naturally of the greatest importance to discover any local rectal pathology when it is present, but in the majority of cases of pruritus ani, and in those with which this paper is chiefly concerned, there is no associated rectal pathology. The visible local lesion can occur as follows:—

i. Acute: i.e. spreading and early.
ii. Chronic: (*a*) stationary; (*b*) healing; (*c*) spreading.

The typical acute lesion shows flat skin, with the lesion superficial, moist and tender and the surrounding skin healthy. There is no induration on palpation. The classical example of this is the pruritus due to a fungus infection with its uniform red colour and sharply defined edge spreading across perfectly healthy skin. At a later stage fungus infection may show only an active rim of red, smooth, involved skin with the inner part appearing normal; this, too, is characteristic.

Other examples of the acute stage are seen with pruritus due to the application of ointments, especially those containing local anaesthetics. Here the lesion is smoother and drier and gives the impression of having been painted on, so little are the deeper layers of the skin involved.

The chronic lesion, on the other hand, shows pale, oedematous, hypertrophied skin, with fissures and rugae radiating peripherally from the anus. There are likely to be infected scratch marks and the whole is bathed in an opalescent discharge. Many of these changes are secondary to scratching and are therefore non-specific. The state of the chronic lesion is ascertained generally by how the patient feels and locally by noting to what extent the lesion is regressing under treatment with regard to its surface characteristics, its edge and the discharge from it.

Some varieties of pruritus start insidiously without any visible acute changes and, indeed, there may be little or nothing to see on inspection at first. Later, secondary changes due to scratching may be superadded, similar to those just described.

DISCUSSION AND TREATMENT

The initial attack of pruritus may be due to a single primary cause, or to a group of causes acting simultaneously. Once present, the condition may become chronic as additional secondary causes are heaped on and the vicious circle becomes established. Unfortunately, once the lesion has become chronic, and this is the common presenting state of affairs, the prolonged action of secondary causes will almost certainly have obscured the primary cause and will, in fact, be able to cause spread of the pruritus even if the primary cause is no longer operative. Therefore the first line of treatment should be to remove the secondary causes which maintain the vicious circle, so that the primary cause, if still operating, will be operating alone. The treatment could thus be considered along the following lines:—

1. *Symptomatic Treatment.* The patient must appreciate that the less he scratches, the better; and to help him it is wise to prescribe a sedative for day and night use if necessary, such as phenobarbitone gr. ½ b.d. Locally, a lotion is provided and calamine lotion with 2% phenol is soothing, especially when alternated with the zinc, starch and boracic dusting powder (equal parts) as used at St. Mark's Hospital, London. It must be stressed that ointment should not be used and that strong antiseptics are to be avoided. If at times the itching becomes intolerable, pinching of nearby healthy skin will give relief, by acting as a counter-irritant. Sometimes, if the patient is unco-operative, simple means like these will not stop him from scratching, and more heroic treatments will need to be considered.

The injection of oil-soluble anaesthetics, the injection of alcohol or one of the various undercutting procedures designed to interrupt the afferent pathways may be tried; but it must be realized that these procedures have their own complications like abscess formation and skin sloughing, and should rarely be used. In any case, it is bad treatment to aim at producing complete symptomatic relief right from the start. During the period of anaesthesia, the patient will not consider it necessary to persevere with the local treatment and, therefore, when the effect wears off, the recurrence of symptoms is likely to be worse than

ever. Shapiro and Rothman[5] believe that the sensory return is with paraesthesiae. This encourages scratching. The same observations apply to X-ray therapy, which has a limited use only in cases with excess sweating.

To repeat, the irritation of the skin produced by scratching is an important secondary cause of pruritus and it should be possible to stop this. The other complication of scratching, viz. secondary infection, will also aggravate the pruritus and though this may be treated by penicillin by injection, it usually responds well to the local treatments suggested.

2. *General Hygienic Measures.* These have already been mentioned, but it is convenient to summarize them as follows:—The bowel habit should be regulated with senna or milk of magnesia, both mild aperients. Underclothing should be changed frequently, and should be of wide-meshed pattern, either cotton or silk. The skin should be washed with soap and warm water and dried gently at least twice a day, preferably after a bowel action. Antiseptic and superfatted soaps should both be avoided. The perianal region should be shaved.

3. *Fungus Infection.* Proof of this will only be obtained by microscopic demonstration of the fungus which, as Gabriel[6] states, is not easy owing to the frequency of secondary infection which masks the original cause. With the secondary causes such as the irritation from scratching and secondary infection controlled, recognition may be easier, although it is not always so. If there is evidence of fungus infection elsewhere, e.g. desquamation between the toes, it is well worth while to give a course of an anti-fungicide, and Castellani's paint is recommended. All cases are likely to show some improvement with this owing to the drying action of the paint; but the response with a fungus infection is dramatic.

4. *Allergy.* If there is anything in the history to suggest that the patient is an allergic subject, a trial of anti-histaminic drugs should be made, both locally and generally.

5. *Constitutional Factors.* It must be explained to the patient that active co-operation is essential, and it must be realized that fatigue, worry and incidents causing tension will aggravate the condition.

6. *Associated Rectal Lesions.* The question of whether minor associated rectal lesions should be dealt with or not, is sometimes difficult. While almost any rectal condition may be associated with pruritus, the commonest ones found are piles and fissure. Operative treatment should only be undertaken if the indications are sufficient on their own merits, viz. third degree piles, and the standard signs of chronicity in the fissure. If the pruritus is severe and the associated lesion mild, it can safely be assumed that the two do not constitute a straightforward cause and effect sequence, and the results of operative treatment will be disappointing. If the piles are first or second degree, and the fissure early, various forms of injection treatment may be the method of choice for them. It is important, in any case, to postpone any active treatment of piles or fissure until the surrounding skin has been made as healthy as possible.

SUMMARY

Pruritus ani is rarely a simple entity and various factors may produce it at the same time.

A systematic and practical approach to the subject is given with a view to eliciting the primary and secondary causes from a consideration of the history and examination.

The question of underlying rectal disease is considered.

The results of treatment are seldom dramatic and there must be perseverance on the part of both doctor and patient. Emphasis is placed on symptomatic treatment and general hygienic measures.

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2. Swinton (1947): New Eng. J. Med., **236,** 169.
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5. Shapiro and Rothman (1945): Gastroenterol., **5,** 155.
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ABSTRACTS

Penicillin in the Treatment of Uncomplicated Gonorrhoea. A. J. King *et al.* (1950): Lancet, **258,** 701.

While agreeing that the immediate effects of treating uncomplicated gonorrhoea with penicillin are excellent, the authors point out that, in their experience at the Whitechapel Clinic, London Hospital, with more thorough and longer observation than usual, the results are by no means as good as those usually quoted: 1,447 males, treated with five doses of 300,000 units of penicillin at intervals of two hours, showed 6.4% of relapses within two weeks. When observed longer the total failures were 37.7% or, without including those giving a history of previous infection, 27.9%.

While the above results include possible reinfections, the authors are of the opinion that these reinfections do not account for the major portion of the failures.

Antifungal Properties of Various Extracts of Bacillus subtilis *(Tracy Strain).* Moore, M. and Wooldridge, W. E. (1950): J. Invest. Derm., **14,** 265.

Various filtrates of *Bacillus subtilis* were used in an attempt to find an antibiotic effective against pathogenic fungi. These included whole cultures (living cells), crude broth filtrates (live cells), lyophilized crude broth filtrates (cell free) and the several filtrates obtained in the Bacitracin recovery process.

The crude filtrates and whole culture exerted an inhibitory action on the fungi used. Bacitracin and the various filtrates of the recovery process are mildly active against most pathogenic fungi and strongly active against the Nocardias.

Treatment of Acne Vulgaris and Senile Keratoses with Vitamin A. Savitt, L. E. and Obermayer, M. E. (1950): J. Invest. Derm., **14,** 283.

Of 35 college students with acne who were given 100,000 units vitamin A daily, 20 improved, 12 were unchanged and three became worse. Four of the eight controls receiving placebos improved and four showed no change.

Seven of 11 patients with senile keratoses improved after treatment with 150,000 units vitamin A daily and four were unchanged. Two of three cases of arsenical keratoses were improved.

Improvement in all groups was uninfluenced by type or severity of lesions; and it did not become apparent under two months.

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VAN DIE REDAKSIE

SOGENOEMDE NARKOSEMIDDEL-STERFGEVALLE

Veertien jaar gelede is die *Verslag van die Komitee oor Sterfgevalle onder Verdowingsmiddel* voorgelê aan die Minister van Gesondheid.[1] Dié Komitee het 'n baie breedvoerige ondersoek gemaak, en besonder het dit oorweeg die uitwerking van artikel 86 van die Wet op Geneeshere, Tandartse en Aptekers. Hierdie artikel verklaar dat die dood van 'n persoon *terwyl hy onder die invloed van 'n algemene verdowingsmiddel of 'n plaaslike verdowingsmiddel is*, en waarvan die toediening van 'n verdowingsmiddel 'n aanleidende oorsaak is, nie sal beskou word nie as 'n sterfgeval weens natuurlike oorsake volgens die Wet op Lykskouing of die Geboorte, Huwelike en Sterfgevalle Registrasie Wet of enige wysiging daarvan.[2]

Die Komitee op Sterfgevalle onder Verdowingsmiddel het tot die belangrike en weloorweegde gevolgtrekking gekom dat baie sterfgevalle wat nie werklik aan 'n narkosemiddel te wyte is nie as sulks beskou word in Suid-Afrika, en te meer dat artikel 86 van die Wet narkotiseurs onregverdig affekteer want hulle word dikwels gevra om in stervende gevalle te anesteseer, waarop dan amper seker is dat 'n publieke geregtelike ondersoek volg. Die sielkundige uitwerking op die narkotiseur is dat hy geneig is om die chirurg tot 'n oormate aanspoor tot haas en so die lewe van die pasiënt in gevaar bring.[3]

DIE GESKIEDENIS VAN ARTIKEL 86 VAN DIE WET OP GENEESHERE, TANDARTSE EN APTEKERS

Artikel 86 was in die lewe geroep in omstandighede van ‚vrees propaganda op 'n tydstip toe die publiek geglo het dat sulke sterfgevalle meer dikwels voorgekom het as wat regtig die geval was'.[4]

In 1941 het die destydse Redakteur van die *Tydskrif* opgemerk in die redaksie dat die mediese professie onmagtig was om weerstand te bied aan die invoeging van artikel 86 omdat ‚sekere belange daarop aangedring het dat tensy die artikel ingevoeg word die Wetsontwerp uiterse teenstand sou ondervind. . . . Ons het alreeds verskeie kere protesteer teen die behoud van

1. Hierdie Tydskrif, 1936, **10**, 729.
2. *Ibid.*, 1936, **10**, 732.
3. *Ibid.*, 1936, **10**, 732.
4. *Ibid.*, 1936, **10**, 719.

EDITORIAL

SO-CALLED ANAESTHETIC DEATHS

Fourteen years ago the *Report of the Committee on Deaths Under Anaesthesia* was submitted to the Minister of Health.[1] This Committee had made a very extensive survey of the position in South Africa and, in particular, it had considered very closely the effects of sec. 86 of the Medical, Dental and Pharmacy Act which states that the death of a person *whilst under the influence of a general anaesthetic or a local anaesthetic*, or of which the administration of an anaesthetic had been a contributory cause, shall not be considered a death from natural causes within the meaning of the Inquest Act or the Births, Marriages and Deaths Registration Act or any amendment of these Acts.[2]

The Committee on Deaths Under Ānaesthesia came to the important and considered conclusion that many deaths which were not genuine anaesthetic deaths were regarded as such in South Africa and further that sec. 86 of the Act operated ' unfairly to anaesthetists who are frequently called upon to anaesthetize moribund cases with the practical certainty of having to face a public inquest. The result is to create a state of mind in the anaesthetists which tends to endanger the safety of the patient by unduly hurrying the surgeon '.[3]

THE HISTORY OF SECTION 86 OF THE MEDICAL, DENTAL AND PHARMACY ACT

Section 86 was introduced in circumstances of ' panic propaganda at a time when the public believed that such deaths were much more frequent than they really are '.[4]

In 1941 the then Editor of the *Journal* commented in an editorial that the medical profession had been powerless to resist the inclusion of sec. 86 ' because certain interests urged that unless it was included opposition to the Bill would be extreme. . . . We have already on several occasions protested against the

1. This *Journal*, 1936, **10**, 729.
2. *Ibid.*, 1936, **10**, 732.
3. *Ibid.*, 1936, **10**, 732.
4. *Ibid.*, 1936, **10**, 719.

die reg in die Wet . . . wat bepaal dat 'n ondersoek moet volg in elke geval waar die pasiënt sterf „terwyl hy onder die invloed van 'n verdowingsmiddel is". Ons protes was gedoen in die belang van die publiek. . . .'.[5]

Daar die Wet op Lykskouing en die Geboorte, Huwelike en Sterfgevalle Registrasie Wet tesame alreeds alle vorms van sterfgevalle in aanmerking neem, of dit natuurlike oorsake het of nie, is dit moeilik om te besef watter doel bereik word deur hierdie heeltemal oorbodige artikel van die Wet op Geneeshere, Tandartse en Apteekers.

ARTIKEL 86 TE BREEDVOERIG

Noukeurige ondersoek van artikel 86 maak dit duidelik dat selfs 'n dood waar die toediening van die narkosemiddel (plaaslik, rugmurgs of algemeen) in geen opsig bygedra het, moet ook tog ondersoek word weens die eienaardige bewoording van die Wet.

Die ondervinding van 14 jaar het nou bewys dat artikel 86, wat by die Wet ingevoeg is deur ongewenste politieke druk, geen goeie gevolg het nie, en ons kan nie anders as saamstem dat in die praktyk 'n toestand ontwikkel het wat baie verrykende implikasies meebring wat die Wet nie oorspronklik beoog het nie.[6]

Omdat die groot meerderheid van narkose-sterfgevalle glad nie narkose-sterfgevalle in die strenge sin is nie, maak dit wenslik dat stappe nou gedoen word in die belang van die publiek sowel as die professie dat sulke sterfgevalle in hulle regte perspektief beskou moet word.

SOGENOEMDE NARKOSE-STERFGEVALLE EN GEREGTELIKE ONDERSOEK

Die Komitee het verskillende belangrike aanbevelings gedoen om die manier waarop die geregshowe sulke ‚narkose-sterfgevalle' behandel, te verbeter, daar sulke sterfgevalle geassosieer word met die operasie self. In besonder is aandag gevestig op die Verslag van die Britse Parlementêre Komitee op die *Coroner's Law* (1910) wat lees: ‚Elke sterfgeval onder verdowingsmiddel behoort gerapporteer te word by die Coroner as dit òf in 'n publieke inrigting òf in 'n private huis voorkom. As die lykskouer (*Coroner*) by nader ondersoek tevrede is dat die nodige versigtigheid en bekwaamheid gebruik was, en dink dat dit onwenslik is dat 'n ondersoek gehou moet word, dan sal hy die doodsertifikaat aanneem en die publieke ondersoek laat vaar'.[7]

Dit word algemeen aangeneem dat daar baie ruimte vir verbetering is in die metode waarop sulke sterfgevalle teenswoordig behandel word. Die vrae wat voorkom gedurende ondersoek in sulke gevalle is nie net alleen tegnies maar baie ingewikkeld en as die nodige vereistes van die Verslag oor die *Coroner's Law* (1910) nie kan bevredig word nie, dan is dit wenslik dat sulke ondersoeke gedoen moet word deur 'n magistraat wat bygestaan word deur mediese assessors.

5. *Ibid.*, 1941, **15**, 241.
6. *Ibid.*, 1941, **15**, 241.
7. *Ibid.*, 1936, **10**, 732.

retention of the proviso . . . in the Act . . . that entails an enquiry into every case where the patient dies " while under the influence of an anaesthetic ". Our protest was made in the interest of the public . . .'.[5]

Since the Inquest Act and the Births, Marriages and Deaths Registration Act between them adequately cover all forms of death, whether due to natural causes or not, it is difficult to see what purpose, if any, is served by this entirely anomalous section of the Medical, Dental and Pharmacy Act.

SCOPE OF SECTION 86 TOO WIDE

Careful study of sec. 86 makes it clear that even a death to which the anaesthetic (local, spinal or general), *has not been in any way contributory*, must still be a matter of public enquiry as an anaesthetic death because of the peculiar way in which the Act has been worded.

The experience of 14 years has now proved that sec. 86, inserted into the Act by most improper political pressure, serves no good purpose and we cannot but agree that in practice the situation that has developed has acquired implications obviously far wider than the legislature could ever have anticipated or intended them to be.[6]

The fact that the vast majority of anaesthetic deaths are not anaesthetic deaths in the strict sense at all makes it desirable that steps should now be taken in the public as well as the professional interest which will allow these deaths to be viewed in their proper perspective.

SO-CALLED ANAESTHETIC DEATHS AND INQUEST PROCEDURE

The Committee made several important recommendations to improve the handling by the Courts of these so-called anaesthetic deaths, which are really deaths associated with operative procedures. In particular, attention was drawn to the British Parliamentary Committee's Report on the ' Coroner's Law ' (1910) which reads: ' Every case of death under an anaesthetic ought to be reported to the Coroner whether it occurs in a public institution or a private house. If the Coroner on enquiry is satisfied that due care and skill have been used and thinks it undesirable that there should be an investigation he will accept the death certificate and dispense with a public enquiry '.[7]

It is generally agreed that there is room for considerable improvement in the method of handling these inquests at the present time. The issues that arise during enquiry into these deaths are not only technical but extremely intricate; and if the adequate provisions of the Report on the Coroner's Law (1910) cannot be implemented, there is much to be said in favour of a system whereby such inquests should *necessarily* be conducted by magistrates who have the assistance of medical assessors.

It is felt in some parts of the country that the decision

5. *Ibid.*, 1941, **15**, 241.
6. *Ibid.*, 1941, **15**, 241.
7. *Ibid.*, 1936, **10**, 732.

Op sommige plekke van die land word dit gevoel dat die uitspraak nie altyd 'n gepaste verhouding tot die feite het nie. As daar selfs 'n moontlikheid is dat dit kan gebeur, dan word dit blykbaar wenslik dat die ondersoekende magistraat so veel hulp en leiding as moontlik gegee moet word. Dié doel word op die beste manier bereik deur die getuie oor die saak so duidelik as moontlik aan die hof voor te lê, en daarop aan te dring dat mediese assessors, wat die nodige kennis het om te besluit oor spesialiseerde getuienis wat gegee word, in elke geval gebruik word.

Moderne metodes van die voortdurende opmerking van sulke aspekte soos die bloeddruk en asemhaling gedurende die operasie maak dit moontlik dat die toestand van sake op die tydstip van die ongeluk bepaal kan word, en die ondersoek van hierdie informasie deur onafhanklike persone wat in staat is om die relatiewe waardes van die verskillende bevindings te kan waardeer, kan baie daartoe bydra om tot 'n juiste gevolgtrekking te kom wat eintlik die faktore is wat gelei het tot die sterfgeval.

Dit sal ongetwyfeld baie moeilik wees om veranderings in die bestaande Wet teweeg te bring om ongewenste publisiteit in sulke geregtelike ondersoeke te voorkom. Die metode van ondersoek, egter, kan ongetwyfeld baie meer doeltreffend gemaak word op die manier hierbo aangedui, en dit is te hope dat voorstellings met dié doel tot die regte persone gemaak sal word deur die Vereniging van Narkotiseurs sowel as deur die Mediese Vereniging.

Tot die betrokke Wet verander is, sal dit baie wenslik wees dat die aanbevelings uitgevoer word van die Agerende Sekretaris van Justisie wat op 20 Julie 1947 die wenslikheid erken het dat 'n magistraat die hulp moet inroep van 'n deskundige op dieselfde manier as in die geval van ongelukke onder die Myne en Werke Wet. ‚Daardeur sou verseker word dat 'n bedrewe, ervare en onpartydige ondersoeker, saam met 'n magistraat, die omstandighede waarop die dood plaasgevind het sal ondersoek, en verseker dat al die gevalle in die Unie eweredig en gelykvormig behandel sal word. As die aantal ondersoeke gering is word daar geen buitengewone las op die Departement geplaas nie, en as daar baie is, is dit des te meer belangrik dat die ondersoeke in bekwame hande geplaas word'.

Na versuim van 14 jaar is die professie geregtig om te verwag dat stappe gedoen sal word om die toestand te beredder.

VOLDOENDE LYKSKOUING IS NODIG

Deeglike en voldoende lykskouings behoort altyd gedoen te word in gevalle wat onder narkosemiddel sterf, en veel is bevat deur 'n onlangse besluit van die Natal Binnelandse Tak dat persone wat lykskouings hou bedrewe in hierdie soort werk moet wees.

In 'n land soos hierdie waar dorpe en stede dikwels ver van mekaar geleë is en ver van groot sentrums is, is dit nie altyd moontlik om so perfekte raad toe te pas nie. Daar is egter min twyfel dat die Unie se Departement van Gesondheid die behoefte erken om so 'n

arrived at does not always bear an appropriate relation to the actual facts presented. If there should even be a risk that this could happen, it obviously becomes desirable to give the inquest magistrate as much guidance and assistance as is possible. This is best achieved by presenting the evidence about the case as clearly to the Court as possible and pressing for the routine employment of assessors who have sufficient knowledge to appreciate the quality of the expert evidence given.

Modern methods of the continuous recording of such features as the blood pressure and the respiration during operations, make it possible to pin-point the state of affairs at the time of the accident, and analysis of this kind of information, by independent persons able to appreciate the significance of the findings, may do much to establish a situation in which there can be a more proper apportionment of the various factors contributing to the fatal outcome in a particular case.

It will undoubtedly be extremely difficult to make any amendments to the existing law but this step is very necessary in order to prevent undesirable publicity in inquests of this type. In the meantime the apparatus of investigation can undoubtedly be made more serviceable in the manner outlined above and it is to be hoped that representations to this effect will be made in the proper quarters by the Society of Anaesthetists as well as by the Association.

Until such time as the appropriate Act is amended, it would be most desirable to give full effect to the recommendation of the Acting Secretary for Justice who, on 20 July 1947, admitted the desirability that a magistrate should call to his assistance an expert much in the manner adopted in regard to accidents under the Mines and Works Act. 'This would ensure an enquiry into the circumstances of a death by a skilled, experienced and impartial investigator in addition to the magistrate, and ensure the equal and uniform treatment of all cases in the Union. If the number of enquiries is small, no great burden is placed on the Department and, if it is large, it is the more important that the enquiries be in competent hands'.

After a delay of 14 years the profession is entitled to expect that the overdue steps to remedy the situation should now be taken.

ADEQUATE AUTOPSIES REQUIRED

Cases of anaesthetic deaths are always cases which should be thoroughly and completely autopsied and there is much substance in a recent resolution from the Natal Inland Branch that persons performing autopsies should be experienced in this kind of work. In a country such as ours, in which towns and villages are very often far apart and at great distances from big centres, it may not always be possible to apply such a counsel of perfection. There is little doubt, however, that the Union Health Department recognizes the need

deskundige diens as moontlik te verskaf in hierdie belangrike aspek van die werk, en waarskynlik sal hierdie diens geleidelik uitgebrei word om 'n groter radius vanaf die groot sentrums in te sluit.

VOLDOENDE OPLEIDING IN NARKOSE

Daar is egter nog 'n ander kant aan die vraag wat nie vergeet moet word nie. Daar is geen ooreenstemming oor die kwessie of huidige opleiding in narkose in hierdie land voldoende is. Belangrike stappe om hierdie tekortkoming reg te maak is alreeds geneem op sekere sentrums deur die instelling van voltydse onderwyspersonele, wat ongetwyfeld veel sal doen om die standaard van opleiding te verhoog en die toediening van narkose te verbeter.

Hierdie probleem is besonder dringend veral daar die aantal interns, wat moet ondervinding opdoen in die toediening van narkose, baie groot is. Hierdie aspek van hulle opleiding word ongetwyfeld noukeurig in ag geneem deur die Mediese Raad.

Ofskoon ons mag aandring om meer bekwame patoloë om die dooies te ondersoek, is die behoefte net so groot om bekwame narkotiseurs om vir die lewendes te sorg. Bedrewe narkotiseurs kan nie opgelei word met massaproduksie opvoedkundige metodes nie. Dit is waarskynlik waar om te sê dat geen soort van mediese dokter op hierdie manier kan opgelei word nie, maar die argument geld nog meer wanneer ons kom by die opleiding van narkotiseurs. As 'n noodlottige geval eers gebeur het dan is dit wenslik om regverdig te wees teenoor die geneesheer sowel as teenoor die publiek. Maar dit is ongetwyfeld baie noodsaaklik dat die land voorsien sal wees, beide op die platteland en in die stede, van praktisyns wat so bedrewe in die toepassing van narkose sal wees dat geregtelike ondersoek op sulke tragiese ongelukke baie selde moet voorkom.

to provide as expert a service as possible in connexion with this important aspect of its work and it is likely that this service will steadily be extended to embrace a progressively bigger radius from each large centre.

ADEQUACY OF TRAINING IN ANAESTHESIA

There is, however, another side to the question which must not be forgotten. There is certainly no agreement that present-day training in anaesthesia is adequate throughout the country. Important steps to remedy these deficiencies have been taken at certain centres by the establishment of full-time teaching staffs and this will undoubtedly do much to raise the general level of education as well as performance in the giving of anaesthetics.

This problem is a particularly urgent one in view of the large numbers of interns who must obtain practice in the giving of anaesthetics, and this aspect of their training is one which, we feel sure, the Medical Council has very closely under its supervision.

Although we may press for more competent pathologists to examine the dead, there remains an equally urgent need for adequately competent anaesthetists to deal with the living. Skilled anaesthetists cannot be created with mass production educational techniques. It is probably true to say that no type of medical practitioner can be produced in this way, but the argument has even greater force in respect of training in anaesthesia. Although it is desirable to do what we can to be fair to the practitioner as well as to the public once a catastrophe has occurred, there can be no reservations in stating the urgent case for providing throughout the country, in rural as well as in urban areas, medical practitioners so skilled in the administration of anaesthetics that inquests into these tragic accidents should become a most rare occasion.

VENTRICULAR TACHYCARDIA

REPORT OF A FATAL CASE

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Paroxysmal tachycardia of ventricular origin is a rare and usually a serious disturbance of rhythm. Campbell [1] states that its incidence is 4% of the four varieties of paroxysmal arrhythmias and that not more than one paroxysm in 15 is ventricular.

In four-fifths of the cases collected by Strauss [2] the patients had serious heart disease, and of these 55% had congestive failure, 35% had a recent cardiac infarction, and often both these factors were present. More than half the cases were on digitalis, and in more than a quarter, and in nearly all the special bi-directional types (which White [3] considers as being usually terminal) it was certainly the cause. Attacks have been known to occur also following adrenaline, atropine, quinidine, during sudden exertion, anaesthesia and indigestion. It is more frequent in males and most cases occur after the age of 40 years.

The prognosis of those cases with no underlying heart disease is good and the treatment is straightforward. In the majority, however, the underlying organic heart disease makes the prognosis grave.

The advent of a complication such as the rapid onset

of cardiac failure, or the anticipation of a possible development of ventricular fibrillation, makes the immediate treatment of ventricular tachycardia imperative. Yet, due to the serious heart disease, such treatment is both dangerous and difficult as exemplified in the following case.

REPORT OF CASE

A. B., a European male aged 49 years, was admitted to Dr. A. M. Moll's wards with recent myocardial infarction. The electrocardiogram showed it to be an extensive anterior infarction, in that leads I, aVL, and all the praecordial V leads were affected. The absence of R waves suggested complete transmural necrosis so that his prognosis from the outset was not good (Fig. 1).

One week later, at 7 p.m., he complained of a sudden pleuritic pain on the right side of the chest and a friction rub was heard. Thirty minutes later he complained of malaise and palpitations and his apex rate was over 200 beats per minute. Within 1½ hours he was very distressed and exhausted, with distended neck veins and a rapidly enlarging tender liver. The electrocardiogram at the onset had shown the typical changes of ventricular tachycardia (Fig. 2).

Three grains of quinidine led to violent vomiting, sweating and abdominal pain, but the attack continued. Two c.c. of 2% Procaine intravenously had no effect, and unilateral followed by bilateral carotid sinus pressure resulted only in an alarming convulsion and transient loss of consciousness.

His neck veins were becoming more distended and

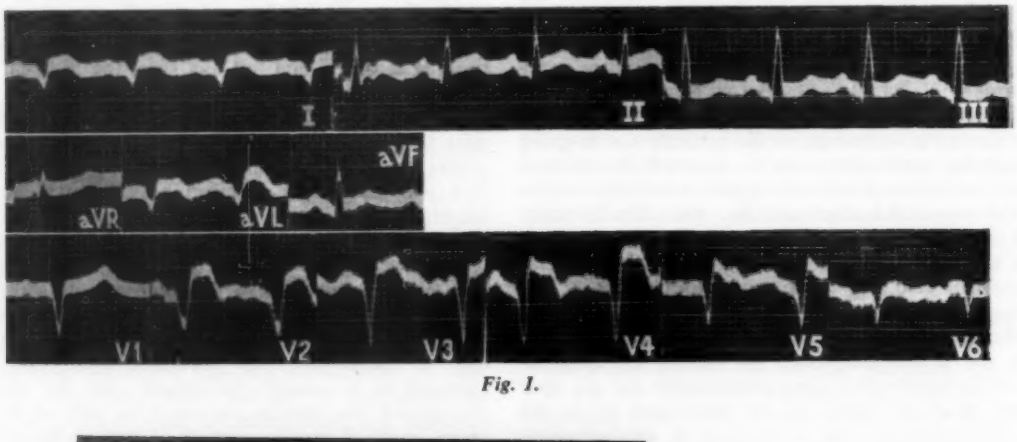

Fig. 1.

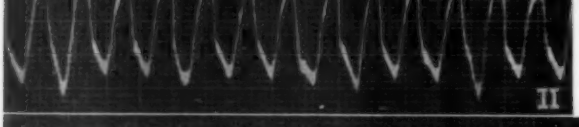

Fig. 2.

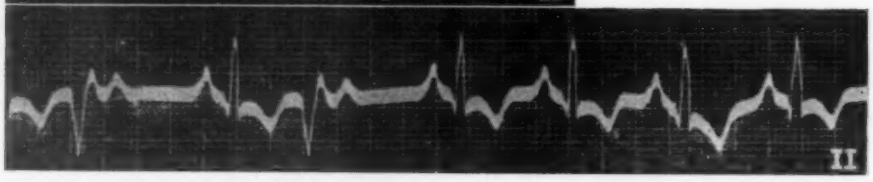

Fig. 3.

Serial electrocardiograms showed a slow return of the ST segment to the iso-electric line, the associated jaundice disappeared and clinically his recovery was proceeding satisfactorily. Three weeks after admission, however, he complained of pain in the right calf and showed a positive Homan's sign. He was immediately dicoumarolized and this was continued until the sixth week of his stay in hospital, when the dicoumarol was stopped, as he was almost ready to be discharged to a country district where adequate control was impossible. He was then allowed out of bed.

his dyspnoea more distressing. The apex rate was 240 beats per minute. It was then decided to administer 20 c.c. of a 15% solution of magnesium sulphate intravenously. This led to an asystole of approximately 20 seconds' duration. It was followed by a normal rhythm with frequent ventricular premature beats (Fig. 3). During the administration of the injection he vomited profusely. The consequent immediate symptomatic relief lasted just over an hour, when ventricular tachycardia returned. The injection was repeated, and again asystole occurred, but despite

adrenaline and coramine his heart did not beat again. Permission for an autopsy was not granted.

DISCUSSION

The aetiology in this case was an underlying myocardial infarction. At no time throughout his hospital stay was he in cardiac failure nor had he been given digitalis. The fact that a friction rub was heard over the area where he had experienced pleuritic pain just before the onset of the tachycardia suggests that pulmonary embolism was the precipitating factor. The source of the embolus could, of course, have been either a mural or a peripheral thrombus. One hour previously he had had a meal.

Quinidine was tried first in this case but a test dose of three grains appeared to have toxic effects. For this reason further doses orally or parenterally as advised by White [3] and Campbell [1] were withheld. Rapid digitalization with the possibility of producing ventricular fibrillation or, as stated by Levin [4] perhaps worsening it, was not attempted. The usual mechanical and reflex measures had no effect. Similarly ineffective was the patient's reaction to intravenous Procaine, but possibly this may have been due to insufficient dosage. It appeared then that only mecholyl, intravenous magnesium sulphate and stellate ganglion block remained as possible methods of treatment. Landau [5] reported a favourable result using 0.5 c.c. ($\frac{1}{8}$ mg.) of Carbachol diluted with 5 c.c. of saline in a slow intravenous injection. His patient, however, had sustained a myocardial infarction several years before. As our patient had a very recent infarction, it was decided to accept Campbell's advice [1] that mecholyl was dangerous and could only be recommended for young patients with normal hearts.

In view of the rapidly developing failure, treatment was considered an urgent necessity; 20 c.c. of 15% magnesium sulphate (equivalent to 3 gm.) was given intravenously with a dramatic and successful response. This was unfortunately only temporary. The same injection was repeated 90 minutes later. After it the patient suddenly died.

In retrospect, we wish that we had tried the safer manoeuvre of stellate ganglion block first, but nowhere in the literature consulted at the time had we seen an unfavourable report on the use of magnesium salts.

SUMMARY

A case is reported of ventricular tachycardia occurring seven weeks after an extensive anterior myocardial infarction, the possible precipitating factor being pulmonary embolism.

The tachycardia failed to respond to quinidine, carotid sinus pressure and intravenous Procaine, yet showed a dramatic response to intravenous magnesium sulphate. The tachycardia recurred within 90 minutes and the patient died suddenly very soon after a second injection of magnesium sulphate.

Consequently it is suggested that magnesium sulphate should be administered very slowly and steadily or it should be classed with digitalis and mecholyl as a dangerous drug for controlling ventricular tachycardia in the presence of serious heart disease.

Further it is suggested that a safer manoeuvre such as stellate ganglion block should be tried first in these cases.

We wish to thank Dr. A. M. Moll for permission to publish this case.

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'WHY DO MY PATIENTS LEAVE ME?' *

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I have taken as my subject for meditation to-night a matter which becomes increasingly puzzling and annoying as one grows older.

'*Why do my patients leave me?*' God knows, I don't. Yet, my young brethren, as you grow older it will begin to puzzle you too when, for some inexplicable reason, you see one after the other of your best patients leaving you for pastures new, and you too will begin to look round for a cause. You who, at the zenith of your popularity, shake your heads and say, 'I am too sure of my patients, they won't leave me'.

The time will come when, looking about for a cause, the first one you will pounce upon in your chagrin as the cause of the defection will be 'The other man'. Then you will blame the patient's friends, and you will blame circumstances; and if you can't find the cause there, you will blame the patients themselves. At last, and very occasionally, if you are of an introspective temperament and in a repentant mood, you might find an infinitesimal amount of blame attached to yourself.

Now let us look for a moment at these various reasons; it might make us less irritable, and give us a more fatalistic peace of mind when we consider the inevitability of the course of events. Moreover, perhaps it might tend to make our work less of that irksome, servile scraping and bowing to fickle patients; whilst a

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determination to do our best in spite of patients coming and going, and to let circumstances take their own course, will tend to make us more content, more genial, and more sociable members of our profession in particular and of the community we live in at large.

Take now the other man as a cause. This is not a reflection on any colleague in particular, but is meant to be a general enquiry into causes. For all I know, I might be 'the other man' to a fellow practitioner.

1. First of all you have the backbiter, of whom we luckily have none. The man who is frankly hostile and mean, the man who oversteps the boundary of all medical etiquette, who calls me an ignorant ass, and who stoops at nothing to prove to all and sundry that I know absolutely nothing and am not to be trusted with their lives.

He comes into the sick room, sees a bottle of medicine with my label on it, opens the cork, smells it with a look of alarm, and says to the patient and all the relatives and friends gathered for the occasion: 'This is rank poison; no wonder the patient can't get better; this medicine is killing him.' And dramatically he proceeds to pour the offensive fluid into the chamber, if there is one.

Or through force of circumstances, and in deference to the wishes of the patient or his advisers, I am constrained to call him in consultation. He enters the sick room with a superior air, and after an elaborate ritual and pompous examination of the patient, he on principle differs from me in his diagnosis, and thereupon, with a professional air, in the full presence of everybody, treats me like a third-year medical student to a lecture on elementary physiology or veterinary pathology by analogy, thereby to impress on my patient and his friends my unfathomable ignorance and his profound knowledge.

But there is the more subtle sneak, who agrees with me and everything I have been doing, but who goes back to the patient and his friends after the consultation and tells them that he did not like to hurt my feelings, but after thinking the matter over, he felt that after all it was his duty towards the patient to tell them that he does not think that my treatment was exactly on the right lines, and hints that it is not professional to take over a case after a consultation; but if they were to pay me off what they owe me to date, he would then be at liberty to attend the patient and conduct the treatment on lines more conducive to the patient's recovery.

Then there is the man who, through a roundabout way, through friends of friends of the patient's friends, lets it come to the ears of my patients that if he had had the treatment of the case matters would have turned out otherwise. He would have done this or that operation, and the patient's life would have been saved. Or, after casual, seemingly disinterested, enquiry or pretended ignorance as to who was in attendance and what he did, stands aghast when he hears what treatment I adopted, and says in well-feigned horror: 'Good Lord, you don't mean to say he did that!' Nothing more—that's quite enough, the seed has been sown. And in a few months or a year or two I no longer see that particular patient. Why? 'Nuf sed. But I am glad to say that sort of thing is getting rarer. Whether it is that I have no more patients to lose, or whether I am getting more charitable in my views, or whether the ethical standard of the profession is improving, I don't know. I hope it is the latter; but in my experience these occurrences are decreasing in frequency.

Next you find the frank charlatan, mostly in the big cities, but not exclusively, with his gadgets and awe-inspiring instruments and methods of diagnosis and treatment. These I treat with deserved contempt but still here and there a patient falls to them by the way and derives the psychological benefit which I, with my more ordinary methods, could not achieve, and he is gone. Closely allied to the charlatan is the so-called self-styled specialist of travel fame, who, by taking a six months' pleasure trip through Europe and touching at Vienna *en route*, returns a full-fledged specialist with wisdom absorbed overnight which shines forth in the towns and villages of our benighted land, and he takes a few stragglers of mine.

Then there is the man who has a legitimate pull over me, who has devoted extra study to one or other special subject, to whom, having spent time and money on perfecting himself in that special subject, I naturally take those of my patients on whose condition their particular knowledge can throw more light. But, unfortunately for me, because he happens to possess more knowledge about certain aspects of our medical encyclopaedia which it has been his privilege or perspicuity to go deeper into, my patient considers him 'wise above his generation' in all matters pertaining to our vast and varied domain of knowledge, and so my patient leaves me after a few lame excuses, and goes to him. Of course, I attach no blame to him for my misfortune. I am just looking facts in the face in trying to answer the question I set out to answer, 'Why do my patients leave me?'

Lastly, there is the younger man, the newly arrived with his latest methods and newest knowledge, his enthusiasm and optimism born from inexperience in a profession where, to the lay mind, at any rate, experience does not count, and to whom incipient old age subconsciously suggests stagnation, fossilization, and mental degeneration. Hence the migration.

But enough gall spilt on my colleagues.

2. Let us see now how my patients' friends influence them to leave me.

First, there are the *bona fide* patients of other doctors who have been benefited by their treatment. These, in their desire to do good to their friends, recommend them to go to their own particular doctor, who has cured them of the very same complaint. Nothing mean or underhand in that. Still, result—a few more gone.

Next you get the touts who are out to acquire patients for the other man by hook or crook. They stop at nothing. Although I might never have had any professional relations with them, yet somehow instinctively they know that I am most incompetent, that what I know has already been forgotten by the genius to whom they recommend my patient. And alas! my patient can't resist that unless 'grappled to my soul with hoops

of rustless steel,' and even then the rivets often give. Exit a few more.

Or the ex-patient who has his knife in for me because I sued him for an unpaid account, or smarting under some actual or imaginary grievance, it is his one desire to get other patients to leave me too, and here and there he does succeed.

From the influence of friends we naturally come to:—

3. Circumstances over which I have no control.

During my absence I am sent for. Not being at home, another practitioner is called in instead, or even through a misdirected messenger I am not called. My colleague is either told, or not told, that I am their regular attendant, but that I am not available.

He treats the case, and if it is a prolonged case, unceremoniously remains in attendance, or he might even report to me as having treated such or such a patient of mine. But at a future illness of that same patient, he or she is so charmed with this their latest acquired affection that he is called in again. 'Seeing that the doctor has attended to me once before, I thought I would just stick to him now. He was so kind and good to me, and his treatment did me such a lot of good.' Another one gone.

The same thing happens during an indisposition, where, through my own illness or that of one of my own kith and kin, I am unable to leave their bedside. Or during a time that I am otherwise engaged, and my patient is either unable through emergency, or unwilling through impatience, to wait until such time as I can attend to him.

I only mention misfortune in treatment and absolute bad luck as a cause. With one family I have all the misfortunes imaginable. The confinement is a mess-up; the patient does not react to treatment; the operation is followed by every imaginable unforeseen complication. I lose one after another in the family, and the very first time they consult the other man the luck turns, and I am turned out. Not my bad luck, but my incompetence, is proclaimed. Not my colleague's good luck, but his smartness, is extolled.

4. Now to vent my spleen on the patients themselves. Some patients die, and of course they are gone. Others leave the country, and they, too, are gone. Then you get the chronics. I get tired of them, and after patiently swallowing every remedy I might have thrust down their throats, and submitting to every torture I might have subjected them to, they get sick and tired of the very sight of me, and I don't blame them. So they leave me.

The incurables; who can blame them if they leave me to clutch at any straw in the vain hope of relief or cure? For a time they pull round a bit, for 'hope lives eternally in the human breast,' and they proclaim the man who has instilled that hope in them, whilst I, poor devil, get relegated to the 'has beens,' and although eventually they go the way of all flesh, still, when they left me they took a retinue of friends and relatives with them.

The hypochondriac, to whose whims I refuse to pander, and whose stories of innumerable ills I refuse to believe, leaves me because I take no interest in him.

Then you get the great host of dissatisfied patients. Dissatisfied because I do not visit them often enough. Dissatisfied because I visit them too often just to make money out of them. Dissatisfied because my charges are too high, and strangely, those dissatisfied because my charges are too low, minimizing the enormity of their complaint by the insignificance of my fee.

The patient who owes me money leaves me. He cannot pay me at the present moment, and either because he is ashamed of his debt or is afraid that he might be shown the door and refused attendance, goes to another doctor and opens a fresh account there. Or he is one who does not pay and does not intend to pay either. He runs up his account until I remind him in no unequivocable terms of his indebtedness to me, or even take more drastic steps to recover my lawful dues, and so with a resentful show of injured dignity he leaves me.

Then I come to the patient who owes me not money, but a debt of gratitude generally for having saved his life or some such trifle. And here we come across a curious, seemingly inexplicable phenomenon.

Why is it that so often a patient who owes you his life, his everything, leaves you, and not only leaves you, but actually goes and slanders you into the bargain? A not by any means rare occurrence. At first I could not understand it, and it used to hurt me terribly until I came to look at the psychological aspect of the matter. Human nature is such that it hates being under an obligation to anybody. So long as I owe anybody anything for which I have not paid fully, I feel instinctively inferior to that person. I even hate him until I have paid him and can look him squarely in the face on an equal footing; and similarly, if a patient owes me his life, he feels under an obligation to me, my inferior, and hates me until he has squared me and can face me on equal terms. They higher the fee, within certain limits, the more they realize that they have paid me substantially for value received, and that is why I said a little while ago, they leave me because my charges are too low.

I wonder whether you will still allow me a little morbid introspection to see what there is in myself that makes my patients leave me. Foremost, I would put staleness. Not necessarily that I become old-fashioned and stick to methods which were in vogue when I was a student, but somehow there is an air of a lack of interest, a boredom, in my relations with my patients. Vivacity and keenness are lacking. Many of us have noticed it in ourselves, and have been unable to lay the finger on the cause of it. Is it stagnation? Is it an endocrine degeneration? What is it? Or is it due to something far simpler and due to other interests which have imperceptibly crept in, so that we no longer devote that time to intensity which we used to. Whereas perhaps formerly we used to live for our work, we now live by our work.

In one case politics has crept in. In another some other outside interest, which at first was a hobby, then became a rival interest, and at last a dominating purpose. Municipal affairs, farming, speculation, even sport. The old saying remains true: 'You cannot serve two masters.' And patients are quick enough to notice

the slightest tendency in that direction long before I have a suspicion of it myself, and they leave me to go to the man who as yet has no other interests and is still as keen as mustard.

I also find that I am less cocksure than I was in my younger days. After, for instance, treating a certain condition in a certain way successfully eight times, shall I say, I come to a similar case, number nine, in which the same treatment is of no avail and utterly fails. The result is, when I come to case number ten, I am not so cocksure about the prognosis as to my treatment as I was when I still treated number eight. So that all I can say to the patient is: 'This line of treatment usually succeeds, and I have every hope that it will succeed in your case also.' Whereas my younger colleague says: 'I have always been successful in cases like yours (and quite truthfully, too, as he has not yet had his number nine, the failure), and therefore I am certain it will succeed in your case too.' You see, a patient does not want probabilities, however rosy the odds may be. He wants positive assurances, and honestly, I cannot give him that, and so he leaves me.

Most of us, as we get older, unless we have degenerated into charlatans and quacks, have gradually become somewhat honest, and somehow we cannot hide the increasing conviction of our stupendous ignorance of the true cause and effect of all the ills that mortal flesh is heir to, or of our paralytic impotence when faced with Nature's determination to slay our patient. The result again is loss of cocksureness. Not necessarily a strangulation of our self-confidence by a growing inferiority complex when faced with a crisis that calls forth all our energy and determination to conquer all obstacles, but rather a gradual dawning of a faint glimmer of that true knowledge which even in ancient days was considered the supreme wisdom. 'Know thyself.' And as we get to know ourselves better and begin to realize our limitations, the fact gradually dawns on our patient too, and their confidence in our infallibility begins to wane. No half-measures for the patient. Not 'It is possible, or even most probable, to cure,' but 'It will most certainly cure.' 'The man who says he can guarantee my cure, he is the man for me,' says my patient, and he leaves me for that man.

Our greatest degeneration in the eyes of our patients, however, is that we become actually, or apparently, slipshod. I get so beastly fed-up with all the piffling little ailments, the coughs and headaches, the so-called pain in the kidneys, and stomachaches, that I start dishing out my stock remedies even before they have finished their tale of woe or recounted their list of complaints, which to them are of such paramount importance. From the native who wants you to 'koppel' him with the 'pomp'—in other words, apply the stethoscope to his cranium, or buttock, or wherever the pain might be, when his voice or the foetor of his breath tells its unequivocal tale—to the man who wants you to make a rectal examination for piles when he has styes; I can't be bothered with such tomfoolery, nor can I put up with the hypochondriac with his imaginary ailments. Consequently, they leave me for others, who devote more time to the diagnosis and the investigation of the obvious.

I am not now speaking of cases who leave me because through carelessness I missed a serious condition, and failed in a true diagnosis. If I lose them, and it does happen to the best of us sometimes, well, I can only say I deserve to lose them; but alas, once gone, they drag a whole company of friends and relatives with them.

One more introspection, and I shall trouble you no longer. Through the ingratitude and deceit, the double-faced and underhand treatment we often experience from many a patient, I find that I become bitter and cynical, and treat every patient as a potential deserter. Annoyed at all my bad debts, I get impatient, and try to strike blood out of a stone in an honest patient, who is really down on his luck, and who, in time, would gratefully have paid me every penny he owes me, but whom I now hurt by my cruelty and want of compassion. He struggles to get the money together. He pays me, yes; but he also leaves me.

Cold and distant, I treat my patients strictly professionally, or rather commercially, as a shopkeeper over the counter, cash for value received, and as often for value not received, lacking sadly the milk of human kindness which binds our patients to us.

These are but a few of the reasons I have discovered why my patients leave me. I dare say you can all add to the list of causes.

Thus they go, and as I look back on the years behind me and see them dropping off one after the other, I am faced with an even more puzzling problem: 'How is it that I have any patients left at all?' And this time I can say in all sincerity, 'God knows. I don't.'

ECTOPIC PREGNANCY*

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Historical Note. Mention of extra-uterine pregnancy was first made in the middle of the 11th century, when the condition was recognised by Albucasis.

In 1604 Riolan gave the first clear description of the clinical picture of ruptured ectopic pregnancy. Before this, the only type recognized was the spectacular secondary abdominal pregnancy which proceeded to term.

By the 19th century the literature on ectopic pregnancy had become extensive; but in the main this concerned itself with the report of individual cases. In 1842 an extensive memoir by William Campbell[9] appeared. While he investigated the history of the subject exhaustively up to that date, according to Lawson Tait[10] his material was confusing in its abundance and want of arrangement.

The outstanding treatise by John Parry[11] (published in 1876) was acclaimed generally for its scholarly approach to the subject and the critical sense displayed. He insisted that the only way in

* From *Scientific Exhibits*, 37th South African Medical Congress (16th Annual Scientific Meeting), Cape Town, 1949.

which the extremely high mortality could be reduced was to open the abdomen and ligature the bleeding vessels. This viewpoint was emphasized in the face of the almost general opposition to any interference of this nature. Portions of the text were extensively quoted by later authors, and the opinions expressed by Parry undoubtedly had a great influence on Lawson Tait.

In 1881 Tait[18] was requested by a Dr. Hallwright to see a patient in consultation. Both agreed that the diagnosis was one of ruptured tubal pregnancy. Writing of the event Tait says: 'This gentleman made the bold suggestion that I should open the abdomen and remove the ruptured tube. The suggestion staggered me, and I am ashamed to have to say I did not receive it favourably'. The patient died and an autopsy confirmed the diagnosis.

In 1883 Tait performed his first operation on ruptured tubal pregnancy—a case of 12 weeks, secondary abdominal pregnancy. Unfortunately, as his contemporaries had predicted, the patient died.

Undaunted, however, he persisted in his point of view and in a series of 42 operations performed between 1883 and 1888 lost only two patients—a mortality of 4·8%. Parry in 1876 had pointed out that the mortality in his series was 67·2%.

Incidence of Ectopic Pregnancies in Cape Town. An analysis of published reports shows that Cape Town has the highest incidence of ectopic pregnancy in the world:

(i) During the last five years 348 cases of ectopic pregnancy have been operated on in the Groote Schuur Hospital. The literature shows that in American hospitals of a comparable size over a similar period an average of 40-50 cases of extra-uterine pregnancy are dealt with[1,5]; in Canadian hospitals about 50 cases[8]; in French hospitals 114 cases[3] and in British hospitals about 40.

(ii) In American hospitals ectopic pregnancies represent 1·2% of admissions to gynaecological wards[1,5] and the incidence in British and Irish hospitals is about 1%. At the Groote Schuur Hospital there have been 6,048 admissions to the gynaecological wards in the last five years. Of these, 348 cases were ectopic pregnancies. *This represents 5·8% of the admissions, again showing an incidence five to six times higher than in almost all other published figures.*

The reason for this overwhelming incidence in Cape Town will be discussed in the section on Aetiology.

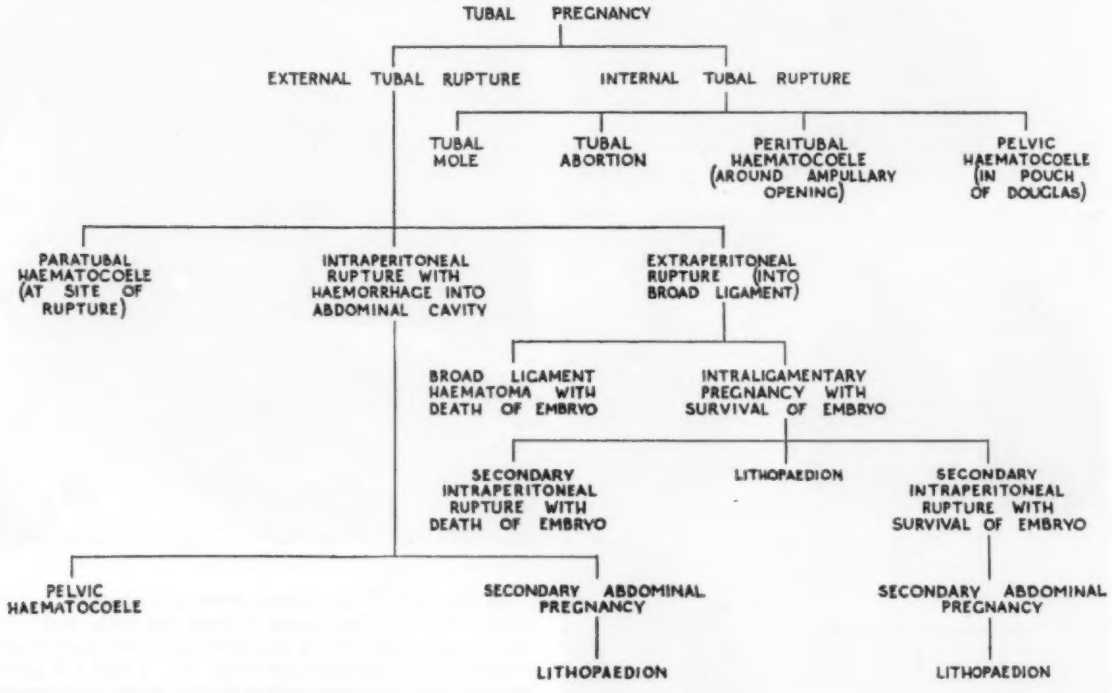
Aetiology. Ever since Lawson Tait (1880)[13] suggested the important role played by pelvic infection in the causation of ectopic pregnancy, an abundant literature has accumulated corroborating this postulate. Herein would appear to lie the explanation of the enormously high incidence in Cape Town, where pelvic infection is so common.

Anyone who has witnessed out-patient clinics in Britain to-day knows that salpingitis is not a particularly common disease. At the Hammersmith Hospital, London, e.g., it takes a second place in frequency to the functional uterine haemorrhages.

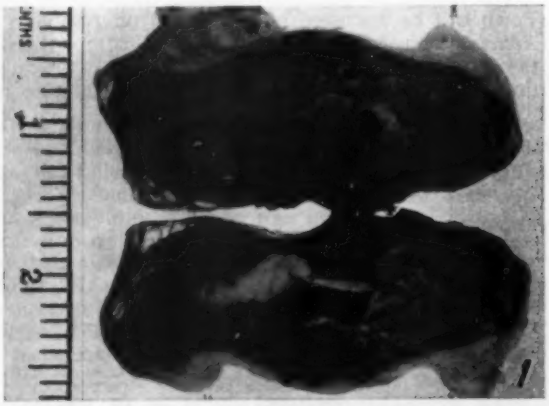
This state of affairs contrasts with the position at the Groote Schuur Hospital. During the past six months 4,173 patients were seen in the Gynaecological Out-Patient Department. Of these, no less than 2,439 or 58% were diagnosed as and treated for salpingitis or other pelvic infections.

TABLE I

TERMINATIONS OF TUBAL PREGNANCY



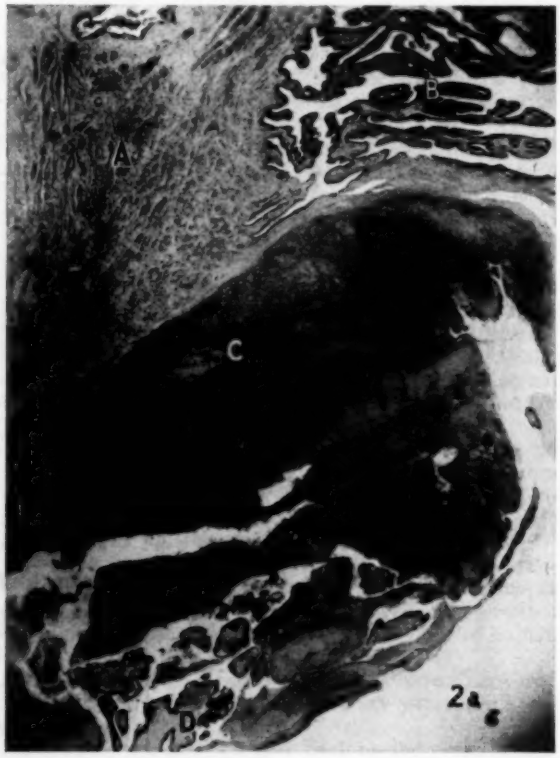
There are many other theories about the causation of extra-uterine pregnancy, such as infantile tubes, excessively long tubes, external transmigration of the ovum from the ovary on one side through the tube of the opposite side, and a decidual reaction in the tube; but our experience here would show that salpingitis is the outstanding aetiological factor, at any rate in Cape Town.



Pathology of Ectopic Pregnancy. The only common position in which an ectopic pregnancy tends to develop is in the Fallopian tube. Rare situations which have been described are:

1. The ovary.
2. The rudimentary horn of a bicornuate uterus.
3. On the uterine ostium of the tube—Munro Kerr's angular pregnancy.
4. The stump of the tube, after a partial salpingectomy.
5. The cervix.
6. An endometrial pocket in the wall of the uterus.
7. Primary abdominal pregnancy has been reported, but there is considerable doubt whether it ever occurs.

Following nidation of the ovum in the Fallopian tube, a series of well-marked changes takes place in both the affected portion of the tube and in the uterus.



In the case of the uterus some enlargement, together with a degree of softening of both the body and cervix, is invariably present. A well-developed decidual reaction occurs in the endometrium (Figs. 10, 11 and 15) and this persists until the death of the foetus, when it degenerates and is cast off vaginally. Absence of vaginal bleeding following rupture of the tube is usually indicative of the fact that the foetus has survived the rupture.

In the Fallopian tube the trophoblast of the fertilized ovum produces cytolysis of the tubal epethilium and the ovum tends to embed itself in the tubal muscle. A full decidual reaction as seen in the uterus rarely occurs, although islands of decidua may develop at the site of embedding. As the ovum continues to grow, erosion of the maternal blood vessels occurs and haemorrhage eventually takes place around the gestation sac. The subsequent pathogenesis is very variable indeed, and the various terminations are illustrated diagramatically in Table 1.

CASE HISTORIES

I. TUBAL MOLES

CASE 1

History. A Coloured female, aged 25 years, with one previous normal labour and puerperium, complained of two months' amenorrhoea with pain on and off in the right iliac fossa. Then one day she suddenly developed vaginal bleeding, again accompanied by pain in the right iliac fossa which radiated in the back. There was no subcostal pain. She went to work, but that evening the pain was so severe that she retired to bed.

The uterus was slightly enlarged, semi-soft. There was a tender mass in the right fornix.

Operation. The peritoneal cavity contained much blood. A right tubal mole was found and a partial salpingectomy was performed.

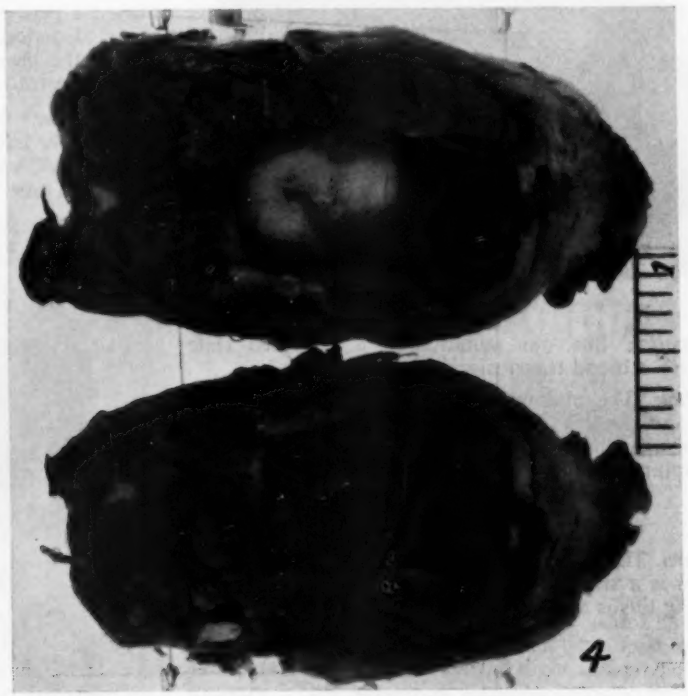
Macroscopic Appearance. The pecimen (Fig. 1) is that of a distended Fallopian tube filled with blood clot. In the centre of the specimen a minute 2-months' old foetus with the attached cord can be seen.

CASE 2

History. A European female aged 23 years had had amenorrhoea for two months and felt she was pregnant. For one week before admission she had bouts of abdominal pain. On the day of admission she developed severe stabbing pain all over the abdomen, and at times it appeared to settle beneath the costal margin. She vomited much with the pain. She had been constipated for three days.

The patient was pale, with a temperature of 98° F. and a pulse of 80 beats per minute. She had generalized abdominal tenderness most marked in the iliac fossae. On vaginal examination the cervix was soft, the uterus retroverted and there was extreme tenderness in both fornices.

Operation. A tubal pregnancy was found. A left salpingectomy was performed.



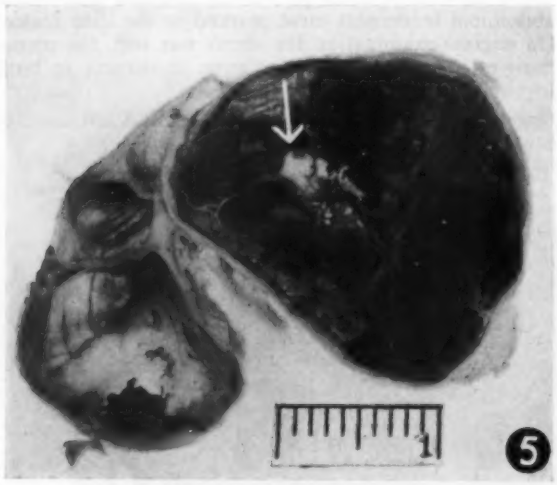
Specimen. This shows several transverse sections through the Fallopian tube (Fig. 2). The larger section shows the ovum (marked by the arrow) embedded in the lumen of the tube. The rest of the tube is filled with blood clot.

Microscopic Appearances. Fig. 2a is a photomicrograph of a section of the specimen; it shows the classical histological features of a tubal pregnancy: a portion of the wall of the tube (A), tubal mucosa (B), blood clot (C) and chorionic villi in the tubal lumen (D).

CASE 3

History. A European female, aged 24 years, with a history of two still births, had had six weeks' amenorrhoea, followed by sudden, severe, knife-like pain in the left iliac fossa. She sent for her doctor who

treated her conservatively. Three days later the pain became so severe that she sent for another practitioner. She now had subcostal pain and vaginal bleeding. A ruptured ectopic pregnancy was diagnosed and the patient was sent to hospital.



Examination. She was admitted in a collapsed state and given a blood transfusion.

Operation. The abdomen was found to be filled with blood and the left tube was found to have ruptured.

Specimen. A dilated Fallopian tube filled with blood. It had ruptured in the centre (Fig. 3).

CASE 4

Specimen. The Fallopian tube is enlarged. In the centre (Fig. 4) is a small foetus enclosed in membranes. Surrounding this is a large blood clot. This is a tubal mole.

CASE 5

History. Whilst undergoing treatment for a chronic pelvic infection this patient developed a severe pain in the hypogastrium. A pregnancy test was positive. Laparotomy revealed the specimen illustrated in Fig. 5.

Specimen. There is a hydrosalpinx. One of the locules contains an ectopic pregnancy. The foetus (marked by the arrow) is shown surrounded by blood clot, forming a tubal mole.

COMMENTARY ON TUBAL MOLES

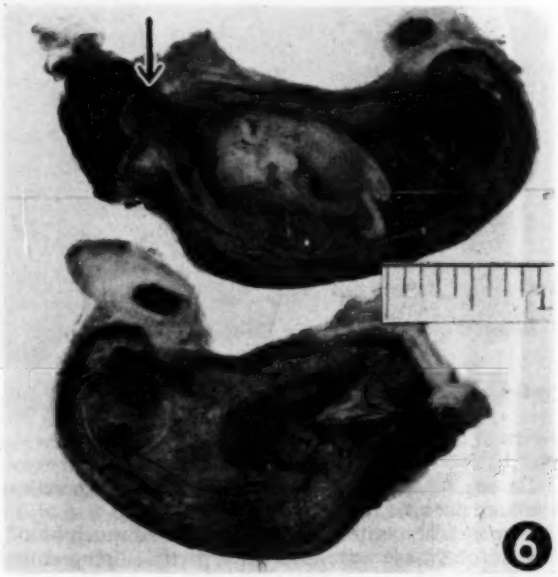
In our experience tubal mole is one of the commonest pathological types of tubal pregnancy. The mechanism of formation of a tubal mole is exactly the same as that of an intra-uterine blood mole or carneous mole. The chorionic villi become more and more separated from their delicate attachments, so that the ovum dies. Eventually the dead foetus and membranes become surrounded by a more or less thick layer of laminated blood clot, forming a tubal mole.

II. TUBAL ABORTION

CASE 6

History. A European female, aged 34 years, who had had two full-time pregnancies, three abortions and a previous ruptured ectopic pregnancy six years earlier, was admitted to hospital complaining of pain in the left iliac fossa and the back, of two weeks' duration. The pain was accompanied by attacks of fainting. She had not missed a period, but the pain began at the time of the expected period. This 'period', however, was abnormal in that the bleeding was dark in colour and lasted for 14 days instead of the usual three to four days.

Examination. This revealed a pale woman, who was tender in the left iliac fossa. Vaginal examination showed a soft cervix, a definitely enlarged uterus and a palpable tender left tube.



Operation. There was some free blood in the peritoneal cavity. The left tube contained a tubal pregnancy and a left salpingectomy was carried out.

Specimen. This is a perfect specimen of a tubal abortion in progress (Fig. 6). So exactly does it resemble the mechanism of abortion of an intra-uterine pregnancy, that the 'bag of forewaters' can be seen in this specimen

bulging through the fimbriated end of the tube (indicated by the arrow).

COMMENTARY ON TUBAL ABORTION

By tubal abortion is meant an expulsion of the ovum through the fimbriated end of the tube caused by contractions of the tube. It is not a very common termination of tubal pregnancy. It may end in a spontaneous recovery. De Lee[4] states that 'prostitute's colic is surely often of this nature'.

III. RUPTURED TUBES

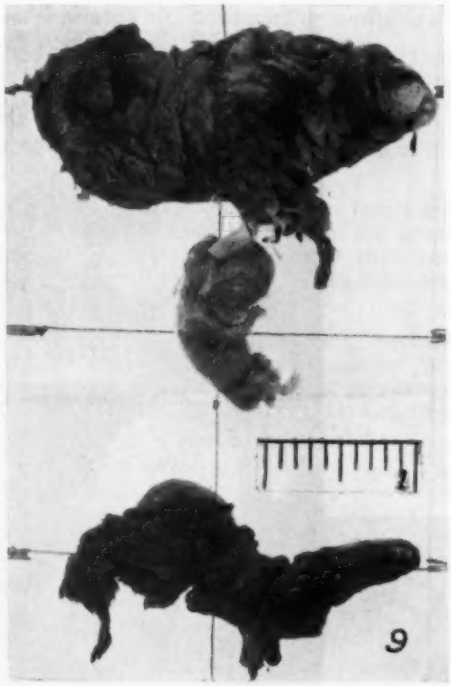
CASE 7

History. A Coloured female, aged 27 years, complained of amenorrhoea and abdominal pain for one month. She had had one normal pregnancy four years before and a 2½ months' abortion three years before. There was no vaginal discharge. One month before admission she developed pain in the left iliac fossa radiating all over the abdomen. The pain was dull, but occasionally it was colicky. A week before admission she passed a few drops of blood *per vaginam.*

Examination. The abdomen was distended below the umbilicus. The cervix was soft and she was tender in both fornices, especially the left. There was a mass in the pouch of Douglas.

Operation. A salpingectomy was performed.

Macroscopic Appearances. The tube has been opened and shows (Fig. 7) a large foetus, chorionic villi and blood clot.



CASE 8

History. A Coloured female, aged 33 years, had had three months' amenorrhoea and then developed urinary disturbances, abdominal pain and slight vaginal bleeding.

Specimen. This shows a widely-distended Fallopian tube (Fig. 8), with a thick fibrous tissue wall. The inner surface shows granulation tissue and a progressive organization of blood clot. Products of gestation are no longer discernible. The probe (A) has been introduced into the lumen of the tube through the site of rupture.

CASE 9

Macroscopic Appearances. Fig. 9 illustrates a ruptured tube with the foetus protruding.

COMMENTARY ON RUPTURE OF THE TUBE

Rupture of the tube with a haemorrhage into the peritoneal cavity, is the classical termination of ectopic pregnancy. If the ovum becomes lodged in the ampulla, this part of the tube usually accommodates it fairly well until about the sixth week, and then the tube may

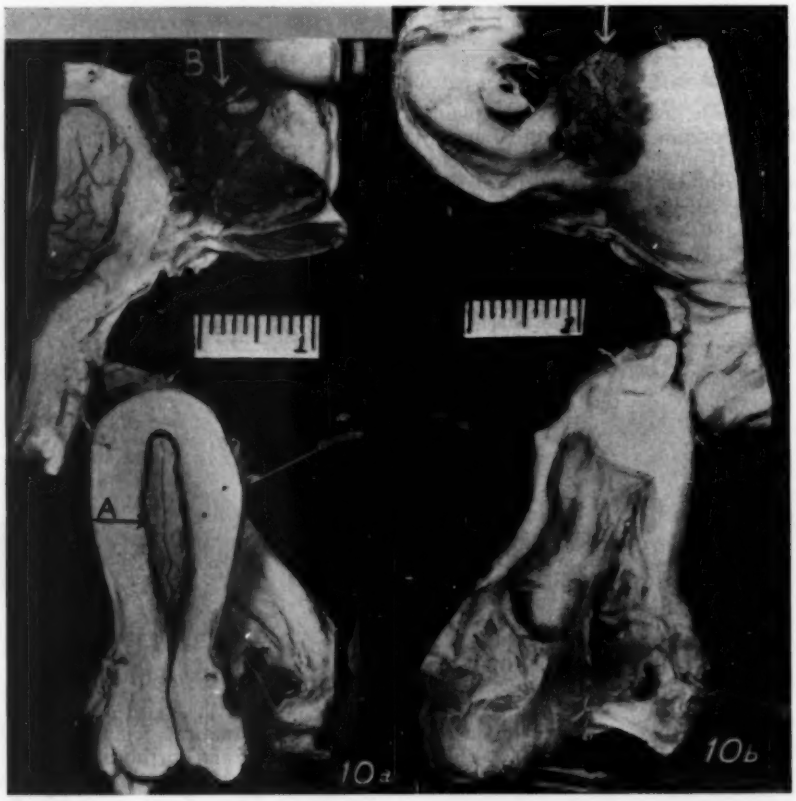
rupture. In the isthmus the lumen of the tube is so narrow that bleeding around the ovum may occur as early as the third or fourth week after the last menstrual period. Moreover, it is *common* for the ovum to cause rupture in the situation, and tubal mole formation and tubal abortion are very uncommon here. Occasionally this rupture may occur along the inferior aspect of the tube and bleeding occur between the layers of the broad ligament.

metrium shows the same changes as in a normal pregnancy. A complete decidua vera is formed as seen in Fig. 11 (indicated by the arrow at 'B').

COMMENT ON INTERSTITIAL PREGNANCY

The least common site for tubal pregnancy is the interstitial portion of the tube. The ovum usually becomes lodged in the ampulla, sometimes in the isthmus and only occasionally (in about 2% of cases[10]) in the interstitial portion of the tube.

If the ovum becomes embedded in the intestitial portion of the tube it gives rise to a swelling in the region of the uterus and when rupture occurs the haemorrhage is, as a rule, very severe because it occurs in a very vascular situation. The arrow at 'A' (Fig. 11) marks the site of rupture of the interstitial part of the tube. The arrow at 'B' indicates well-marked decidua.



IV. INTERSTITIAL PREGNANCIES

CASE 10

Specimen. This shows an ectopic pregnancy in the interstitial portion of the Fallopian tube (Fig. 10a). Histologically degenerate villi are present in this mass. The uterine cavity is occluded by marked decidual reaction. The arrows at 'A' in the specimen indicate well-formed decidua. The arrow at 'B' indicates the rupture of the interstitial part of the tube. In Fig. 10*b* the arrow indicates profusion of chorionic villi through the site of the rupture.

CASE 11

Specimen. This shows an ectopic pregnancy in the interstitial portion of the tube (at arrow 'A'). The endo-

V. LITHOPAEDION

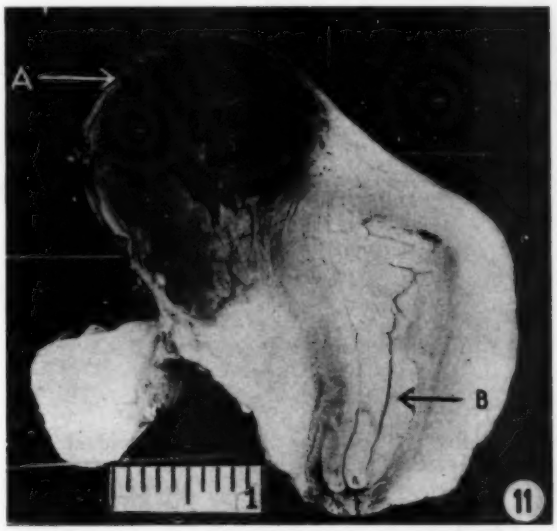
CASE 12

History. The patient was a Coloured female aged 45 years who complained of pain in the left iliac fossa and

premenstrual dysmenorrhoea. Her menses were always regular.

Operation. The uterus was removed and also a distended left tube.

Specimen. The uterus is enlarged and the cavity (Fig. 12) shows irregular endometrial hyperplasia.



The left tube is greatly thickened, and contains the bones of a foetus which must have grown to a considerable size in the tube. A chronic inflammatory reaction in the tube caused this to contract down on the dead foetus and the soft parts have been absorbed. The arrow at 'A' indicates the foetal bones.

COMMENTARY ON LITHOPAEDION

Occasionally in ectopic pregnancy the foetus grows to a considerable size before it dies. The foetus may then dry up and in this state it may be found years later. Absorption of the water of the foetus takes place and its tissues may be surprisingly well preserved. Later calcium salts may be deposited in the sac around the foetus and the child may even be partly calcified itself, forming a lithopaedion ('stone child').

VI. COMBINED EXTRA-UTERINE AND INTRA-UTERINE PREGNANCY

CASE 13

History. A Coloured female aged 33 years, who had had 10 previous full-time pregnancies and two abortions, was admitted to the Groote Schuur Hospital with the following history:—

1. Nine months before admission she had had eight weeks' amenorrhoea, followed by severe lower abdominal pain and fainting, and some vaginal bleeding. This whole attack subsided and she received no treatment for it. This was undoubtedly due to the ectopic pregnancy. the foetus died and no further symptoms were caused by it.

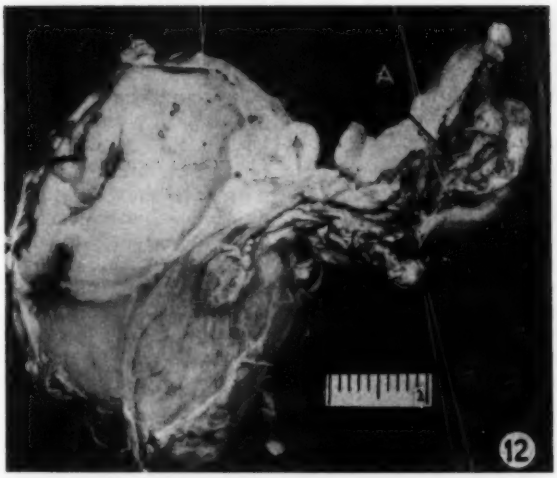
2. Her periods returned and then for two months before admission she had amenorrhoea followed by vaginal bleeding. This was due to a superimposed intra-uterine pregnancy with threatened or inevitable abortion.

Examination. The patient was not grossly anaemic. Vaginal examination revealed a uterus the size of an eight weeks pregnancy and a swelling in the left appendage the size of a small orange.

An ectopic pregnancy was diagnosed and a laparotomy performed.

Operation. An ectopic pregnancy was found in the left tube near the uterine end. In view of the large uterus, the site of the ectopic and the fact that the patient was a 13-para, a subtotal hysterectomy with a left salpingectomy was carried out.

Specimen. This is a very interesting specimen of a combined intra-uterine and extra-uterine pregnancy (Fig. 13). The sac of the intra-uterine pregnancy can be seen in the uterus (arrow 'B' in Fig. 13) and the left tube contains a tubal pregnancy (arrow 'A').



COMMENTARY

This interesting condition of combined intra-uterine and extra-uterine pregnancy, though very rare, is well known. Parry first drew attention to this condition in 1876.[11] Strauss (1898)[12] was able to collect only 32 cases from the literature, while Novak (1926)[9] increased the number to 276.

Two extraordinary cases were described two months ago where the pregnancies went to term, and one child was delivered *per vias naturales* and the extra-uterine child was delivered by abdominal section, the children being alive.

Both these phenomenal cases occurred in Africa. One is described in the *South African Medical Journal*[7] and the other in the *British Journal of Obstetrics and Gynaecology*.[6]

VII. HYDATIDIFORM MOLE IN A TUBE

CASE 14

History. A Native female aged 31 years, who had had three previous normal pregnancies, was admitted to Groote Schuur Hospital in a collapsed state.

She gave a history of 12 weeks' amenorrhoea, followed by a sudden attack of severe lower abdominal pain 10 hours before admission. The pain radiated to the subcostal area and both shoulder tips. She then fainted and collapsed. Six hours later she began to bleed vaginally.

Examination. The patient was extremely pale and collapsed with a blood pressure of 60/30 mm. Hg. There was a marked tenderness and distension of the whole of the abdomen, especially the right iliac fossa.

Detailed vaginal examination was impossible owing to the exquisite tenderness, but a vague mass could be felt in the pouch of Douglas.

Operation. The peritoneal cavity was full of blood. The right tube had ruptured and was the seat of a 12 weeks' pregnancy, the chorion showing in several places the features of hydatidiform mole. This hydatidiform degeneration was confirmed histologically.

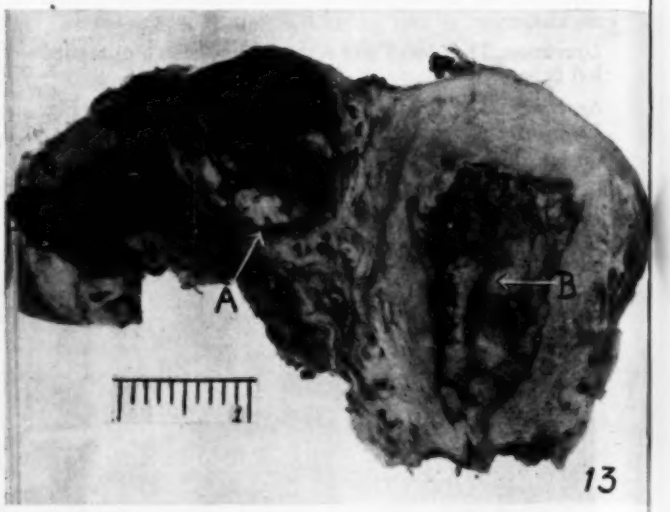
Specimen. In Fig. 14, 'A' indicates normal chorionic villi; 'B' shows the grape-like appearance indicative of hydatidiform degeneration. 'C' indicates the site of rupture in the tube.

Microscopic Appearances. Fig. 14*a* is a photomicrograph of a portion of the hydatidiform tissue. It shows that the connective tissue stroma of the chorionic villi have undergone mucoid degeneration forming the large cysts (the blood vessels having become obliterated ('A')). The surface of the cysts consists of chorionic epithelium, but the thin layer of syncitium (on the outside) is thickened ('B'), and the single layer of Langhan's cells (on the inside) has proliferated and become several layers of cells thick ('C'); these changes, however, are not seen all over, but here and there.

COMMENTARY

This is an extremely rare and interesting specimen. A few other cases of hydatidiform mole in the Fallopian tube have been described.[10]

The foetus in ectopic pregnancy is much more liable to be the subject of congenital abnormalities than in intra-uterine pregnancy. In advanced extra-uterine pregnancy the foetus shows deformities such as hydrocephalus, spina bifida, etc., in 50% of cases.[14] It is not altogether surprising, then, that one of the abnormal forms the ovum may show is hydatidiform degeneration of the chorion.



VIII. DECIDUAL CAST

CASE 15

Specimen. Fig. 15 illustrates a complete decidual cast passed in a case of tubal pregnancy.

Microscopic Appearances. Fig. 15*a* shows a photomicrograph of a portion of the decidual cast. It presents typical decidual cells of pregnancy: large polygonal cells with a wide zone of cytoplasm surrounding the nucleus, the cells being arranged in mosaic fashion.

COMMENTARY ON THE BLEEDING AND DECIDUAL CAST IN ECTOPIC PREGNANCY

The vaginal bleeding in cases of ectopic pregnancy is explained as follows:—

When the ovum dies there is naturally a cessation of secretion of chorionic gonadotrophin which is responsible for the maintenance of the corpus luteum of pregnancy. The oestrogen and progesterone secreted by the corpus luteum have caused the development and maintenance of the decidua in the uterus. When the corpus luteum retrogresses, the decidua is thrown off and this is accompanied by vaginal bleeding. This decidua usually comes away in small particles, but occasionally it is shed as a complete cast, as in this specimen.

The bleeding comes on at a variable time after the pain, usually some hours. Typically it is not profuse and is dark in colour. Occasionally it is more profuse and bright red. In a few cases (10-20%) it is absent altogether.

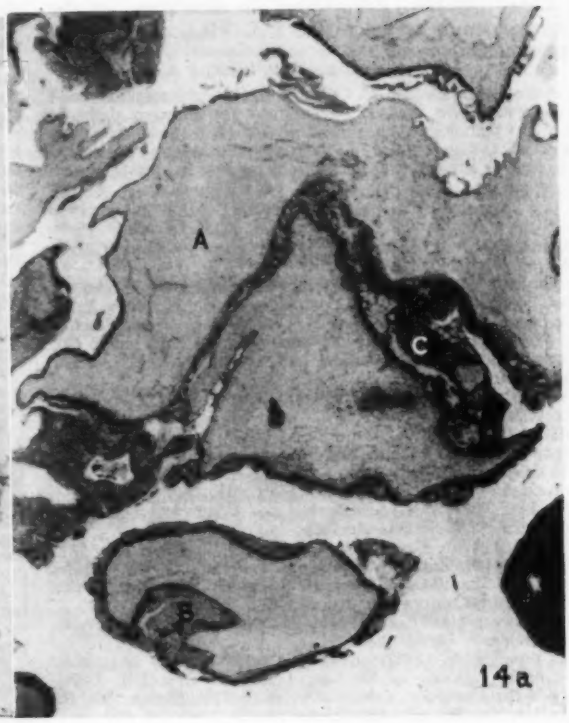
SUMMARY

1. A brief historical note on ectopic pregnancy is given.

2. The high incidence of this condition in Cape Town is discussed.

3. The pathology of tubal pregnancy is described and illustrated by a Table.


C
A
B
14


A
C
B
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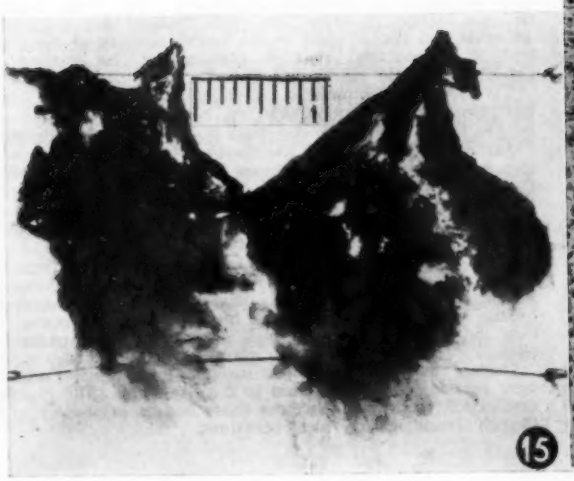
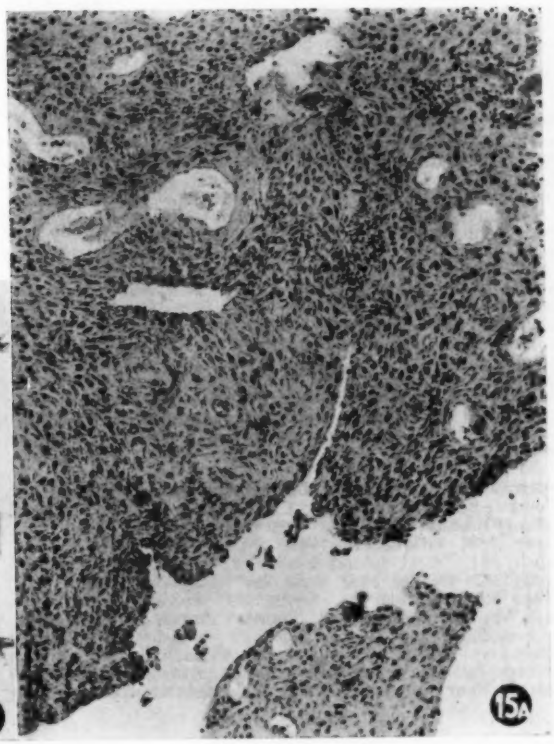

15


15A

4. Case histories, with short commentaries, of the specimens demonstrated at the S.A. Medical Congress, are presented.

Thanks are due to Prof. E. C. Crighton for his encouragement and kind suggestions; to Prof. J. G. Thomson for allowing access to some of the pathological specimens; to Dr. H. A. Shapiro, Editor of the *South African Medical Journal* for his constant and invaluable advice; and to Mr. G. McManus for preparing the photographs.

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VERENIGINGSNUUS : ASSOCIATION NEWS

ANNUAL REPORT OF THE PRESIDENT OF FEDERAL COUNCIL FOR THE YEAR ENDED 30 JUNE 1950

Obituary: It is with deep regret that we have to record the loss through death of the following members:—Drs. A. G. Bester, T. G. Burnett, A. Canard, H. Conyer, A. D. Edington, M. Fine, T. B. Gilchrist, P. G. Harvey, H. Hutchinson, A. W. Isaac, C. E. Keast, H. Levit, A. W. Louw, C. G. Marais, S. K. Montgomery, C. M. Murray, D. Munro, J. G. Muterer, F. H. Napier, R. Ray, H. P. Schroeder, W. Shanks, J. M. Smith, A. R. B. Soga and J. F. van der Westhuizen.

Membership: During the past year there has been an overall increase in membership of only 88, the total membership now being 3,817. There are 23 unattached members. This disappointing feature is due not so much to paucity of new members as to loss of old members, mainly, it would seem, through lack of interest. This is evidenced by failure to notify changes of address and by omitting to pay subscriptions. This is a serious state of affairs and it is time that the profession awoke from its state of complacency and inertia to realize that the Association is its only guardian against the many and various attempts which are made to exploit it from time to time.

Members are distributed among the various Branches as follows:—Border Branch 168; Cape Eastern Branch 58; Cape Midland Branch 164; Cape Western Branch 920; East Rand Branch 182; Griqualand West Branch 60; Natal Coastal Branch 381; Natal Inland Branch 127; Northern Transvaal Branch 372; Orange Free State and Basutoland Branch 227; Orange River Branch 30; Southern Transvaal Branch 986; South West Africa Branch 41; Transkei Branch 78; Unattached members 23.

Honours: During the year the Council honoured five members by the presentation of the Association's Bronze Medal. Four of these were presented at the Opening Ceremony of Congress in Cape Town during September 1949 to Dr. B. G. Melle of Johannesburg, Dr. C. M. Murray of Cape Town and Dr. A. C. Schulenburg of Potchefstroom; also posthumously to the late Prof. A. Sutherland Strachan. In March 1950 during the course of the Council meeting in Johannesburg a similar presentation was made to Mr. J. J. Levin.

Federal Council Meetings: Two meetings of Council were held during the past year, the first in Cape Town from 15 to 17 September 1949 and the second in Johannesburg from 16 to 18 March 1950. The volume of business has been such that although on each occasion the Council has met for three days it has also been necessary to have at least one evening session. In order to expedite the business of the Council, it has been found necessary to introduce a five-minute limit for all speakers other than the proposer of a motion. The average attendance has been 38.

The *Executive Committee* met on two occasions before the Council meetings but has continued to do most of its business between meetings by correspondence. This system works fairly well, but the feeling has been expressed that the Executive Committee should meet at least once a quarter for the transaction of business.

The *Annual General Meeting* was held in Cape Town on 21 September 1949. The President and 98 members were present and Dr. J. B. Ritchie represented the Canadian Medical Association.

Congress: The 37th S.A. Medical Congress and 16th Annual Scientific Meeting was held in Cape Town from 19 to 24 September 1949 under the Presidency of Mr. T. Lindsay Sandes. In addition to the usual scientific papers and discussions, a feature of the meeting was the Scientific Exhibition. Our thanks are due to our Cape Town colleagues for the interest shown and the work done in connection with the Congress which was voted a great success by all who were present.

Committees of Council: The Head Office and Journal Committee continues to render good service in looking after the administrative and financial affairs of the Association. The work at the Head Office has grown considerably as a result of increasing activity in providing services to the members and the efficient conduct of the Association's affairs.

The work of the Central Committee for Contract Practice has also increased greatly. The number of Medical Aid Societies now approved by the Association is 80 as compared with 69 last year. In addition there are 15 Medical Benefit Societies which allow free choice of doctor for specialist services on the basis of the Medical Aid Society tariff. A revised tariff book has been drawn up and will shortly be circulated. The valuable work of Dr. J. C. Gie as Convener of this Committee and Dr. C. A. H. Green as its Chairman deserves special recognition in this report. Ill-health has deprived the Committee of the services of Dr. Gie and has hampered Dr. Green in his Chairmanship. It is hoped that the appointment of an Assistant Medical Secretary in the near future will help to resolve some of the difficulties under which the Committee is labouring at present. The work done by the Association in connection with Medical Aid Societies is an important contribution to the health services of the Union and it is essential that it continue to be carried out expeditiously and efficiently.

The Standing Committee on Health Services in the Union has prepared its report which has been accepted in principle by the Council and has also been submitted to the Branches.

Journals: The issue of the *South African Medical Journal* as a weekly publication continues with success, and in addition the *South African Journal of Clinical Science* made its first appearance as a quarterly publication in March 1950. It has been well received and provides a means of publication for articles of a scientific and research character.

Branches: The Branches have continued their meetings, but with the great amount of business to be conducted there is a danger that the clinical may tend to become overshadowed by the medico-political. If the business sessions become too long the possibility of additional meetings devoted entirely to clinical papers and discussion should be considered.

During the year the bronze insignia for Branch Presidents were prepared and distributed to the Branches. The President of Council was able to present these badges personally to the Branch Presidents on four occasions.

Groups: No new Groups have sought recognition this year. Those in existence have continued to carry on the scientific work of their own specialities. As there is to be no Annual Scientific Meeting in 1950, it has been suggested that the Groups organize conventions of their members for the purpose of reading and discussing papers of special interest.

World Medical Association: The Association was represented at the Third Assembly of the World Medical Association in London in October 1949 by Dr. J. H. Harvey Pirie. Prof. M. van den Ende and Mr. W. G. Schulze, F.R.C.S., acted as observers.

British Commonwealth Medical Council: The Conference for 1950 was held in Brisbane. South Africa was represented by the Medical Secretary, Dr. A. H. Tonkin, who also represented the Association at the Seventh Session of the Australasian Medical Congress held in the same city.

Provincial Hospitalization:—*Cape*: Negotiations have continued amicably and as a result the Provincial Administration has indicated that it wishes to retain, as far as possible, the old and tried honorary system. At present the only paid appointments outside the teaching hospital at Groote Schuur will be those of part-time or full-time medical superintendents in all hospitals. The Administration has indicated that it will not make other appointments without consultation with the Association.

Transvaal: Most of the paid appointments created by the Public Hospitals Ordinance (Transvaal) 1946 have been made, and at present negotiations are proceeding regarding the sum of £50,000 which the Administration is prepared to pay as an honorarium in respect of services rendered during the interim period.

Orange Free State: Agreement has been reached between the practitioners and the Administration and the only outstanding question at present is the status of private pathologists and radiologists.

Natal: No drastic changes in hospital policy have taken place yet, although the Provincial Administration is extending the scope of its activity in pathological services and the provision of specialist services to outlying hospitals.

Finance: The funds of the Association were increased at the end of 1949 by a profit of £4,659 on the year's working. The finances generally show stability and every endeavour is made to render to members the maximum service with the greatest efficiency at the minimum cost. The accumulated funds now stand at £25,206.

The *Benevolent Fund* continues to assist the needy but is hampered by the fact that the calls it receives are larger than the funds for disposal. In order to conform to the provisions of the Welfare Organizations Act No. 40 of 1947, it was necessary to draw up a complete constitution based on the Act and the rules previously laid down by Council. The capital of the Fund now stands at £26,562, but a great deal more is required. Only the interest on the capital and an amount from current contributions equal to not more than half of the interest may be used for benevolence, a restriction which prevents us from responding more generously to the many calls for assistance by distressed dependants of colleagues. The contributions of members are much appreciated and are gratefully received.

Library Grants: During the year requests were received from the libraries of the Universities of Cape Town and the Witwatersrand for increased grants. These increases have been made and members are reminded that the facilities of both libraries are available to them either by personal visit or by post.

General: The work of the Medical Agencies in Cape Town and Johannesburg shows gratifying expansion and members have been appreciative of the efforts made on their behalf.

During the year the Council has agreed to the establishment of a Medical Insurance Agency and it is hoped through this medium to supply yet another service to our members. Expansion of activity and service to the members of the Association is the objective which we keep constantly in view.

In conclusion the Council records its appreciation of the work of the Head Office and Journal staff and of all honorary officials and Committees of the Association.

A. W. S. Sichel,
President.

Cape Town.
26 July 1950.

THE BENEVOLENT FUND

The following contributions to the Benevolent Fund during June 1950 are gratefully acknowledged:

Votive Cards: *In Memory of*:
Dr. Edington *by* Dr. S. McMahon.
Mrs. A. Norton *by* Dr. C. E. L. Burman.
Dr. S. K. Montgomery *by* Dr. J. G. Louw, Dr. A. I. Goldberg, Dr. J. P. de Villiers.
Dr. C. M. Murray *by* Mr. L. B. Goldschmidt, Dr. A. I. Goldberg, Dr. Z. J. de Beer.
Baby Gold *by* Dr. J. J. van Zyl.
Miss Ada du Bois *by* Dr. G. Stafford Mayer.
Mr. John Day *by* Dr. H. O. Hofmeyer.
Mrs. I. J. Sterling *by* Dr. H. O. Hofmeyer.

Total Amount Received from Votive Cards:	10	19	6
Services Rendered to: Dr. F. J. Fismer *by* Dr. J. Wolf Rabkin.			
Total Amount Received from Services Rendered:	10	0	0
Donations:			
37th S.A. Medical Congress	4	1	6
The Ex-service Medical Officers Society of South Africa, Medical Association of South Africa, Southern Transvaal Branch	84	3	6
Cape Western Branch Members	4	3	0
	£113	7	6

PASSING EVENTS

TARIFF OF FEES FOR APPROVED MEDICAL AID SOCIETIES

A new Tariff Book of Fees for Approved Medical Aid Societies has been drawn up incorporating the 10% reduction recently agreed to by the Association after consultation by questionnaire with its members. This is effective from 1 July 1950.

Copies have been posted to members of the Association, but extra copies may be obtained on application to the Medical Secretary, P.O. Box 643, Cape Town. Orders should be accompanied by a remittance of 9d.

* * * *

Prof. R. H. Goetz of the Department of Surgical Research, University of Cape Town, has been appointed a member of the Angiology Research Foundation, Baltimore, United States of America.

* * * *

Dr. and Mrs. Th. Schrire have left by air for a holiday in England and on the Continent. They will be away for three months.

* * * *

Dr. C. W. Coplans and Dr. A. Reichlin, specialists in physical medicine, have entered into partnership and have commenced practice at Dumbarton House (sixth floor), 1 Church Street, Cape Town.

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Messrs. Gurr Surgical Instruments (Pty.) Limited are the sole South African agents for the firm of Gowlland, manufacturers of diagnostic sets, as advertised in this *Journal* of 22 July 1950.

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Dr. S. Abel, M.B., Ch.B. (Cape Town), F.R.C.S. (Edin.), D.O.M.S. (R.C.P. & S.), has returned after five years' post-graduate study in Britain.

He worked at Moorfield's Eye Hospital (London), the Royal Infirmary (Edinburgh) and was R.S.O. for a year at the Sussex Eye Hospital, Brighton.

Dr. Abel has commenced practice as an Ophthalmic Surgeon at 201 Grand Parade Centre, Cape Town. Telephone 2-0554.

* * * *

Dr. E. M. Higgs has left the Witrand Institution, Potchefstroom, and has purchased a practice at Port Edward, Natal. She has also resigned from the register of Specialist Psychiatrists and has resumed general practice.

NEW PREPARATIONS AND APPLIANCES

'LYNORAL' (ETHINYL OESTRADIOL): 1 MG. TABLETS

Since its introduction *Lynoral* has been extremely successful in the treatment of all conditions where oestrogens are indicated. Tablets of 0.01 mg. give good results in menopausal cases, and tablets of 0.05 mg. are equally satisfactory in the treatment of amenorrhoea, inhibition of lactation, and other indications.

These results led to a demand for a tablet of higher strength of *Lynoral* to provide convenient oral treatment for inoperable prostatic carcinoma and inoperable senile mammary carcinoma, missed abortion and induction of labour.

Organon Laboratories announce that tablets of *Lynoral containing 1 mg. of ethinyl oestradiol are now available* for the treatment of:—

Inoperable Prostatic Carcinoma: *Dosage*. 1-3 tablets daily initially, maintaining on about ½-1 tablet daily, depending on serum acid phosphatase findings.

Inoperable Senile Mammary Carcinoma: *Dosage*. 1-3 tablets daily, maintaining on about ½ tablet daily. (*Lynoral* is probably contraindicated in mammary carcinoma in younger women.)

Missed Abortion: *Dosage*. 1 tablet every three hours for up to 48 hours.

Induction of Labour: *Dosage*. 1 tablet every two hours up to 15 doses.

There is at present no justification for employing this very high dosage for any other indications.

Form: *Lynoral* tablets (scored for halving) each containing 1 mg. ethinyl oestradiol.

In tubes of 25 and bottles of 100, 500 and 1,000.

Tablets of 0.01 mg. and 0.05 mg. are also available.

QUESTIONS ANSWERED

THE STRENGTH OF HUMAN MILK

Q. Can the milk of a normal mother be either 'too strong' or 'too weak' for her baby? Are there methods or tests for determining this?

A. The milk of a normal healthy mother is, beyond dispute, the natural food for her normal healthy baby. It would, therefore, be the correct strength for her baby. Exceptions to this law of nature are fortunately rare. It must be remembered, however, that all human milk is not always perfect.

Large-scale analyses of human milk samplings have revealed the following average composition (bearing in mind that the transitional period from colostrum to fully constituted milk may take some weeks):—

Protein (1.5%-2.25%). The protein needs of the infant are satisfied at the lower figure and protein indigestion does not occur at the higher. This variation is, therefore, of no significance. Where the maternal diet is grossly deficient in protein, the milk may show a similar lack. Under these conditions, the breast would probably fail to secrete an adequate quantity of milk as well.

Some paediatricians, particularly in the U.S.A., think that human milk has insufficient protein for the special requirements of the premature baby and that these babies do better with a protein supplement to breast milk, or by the use of cow's milk with its higher protein content.

Carbohydrate (6%-7%). The carbohydrate content of milk is the least variable of all its constituents and is little influenced by the mother's food intake or state of nutrition.

Fat (2½%-5%). This is the most variable constituent in breast milk, not only in different persons, but also in different stages of the same nursing and at different times of the day. Single samples of milk may show variations from 1% to 10% of fat; and one presumes that it was in respect of the fat content of milk that the question under discussion was framed.

The fat percentage of the milk at the end of a feed is remarkably higher than that of the 'fore milk'. If ever the analysis of an isolated specimen is contemplated, this should be borne in mind and, in any case, accurate figures would only be possible with a pooling of different samples from each feed over a 24-hour period. Despite a variability in the fat content of the milk of different subjects, proved cases of a 'too rich' milk causing 'fat dyspepsia' in a normal baby are of exceptional rarity. In such cases it would be rational to allow the baby to empty the breasts only partially at each feeding and so to avoid the higher fat values of the 'hind milk'.

On the other hand, breast milk with consistently insufficient fat content for the baby's caloric requirements is of even greater rarity.

In conditions where the infant's digestion is upset, as in gastroenteritis, ordinary breast milk, particularly its fat content, may not be tolerated and the expressed milk may have to be given in diluted form for a short period.

The vitamin content of the mother's milk will vary with the adequacy of her own vitamin intake. A routine supplement of vitamins A, D and C, after the first month, is a wise procedure in breast-fed as well as bottle-fed babies.

Deficiency of mineral content of the milk would in like measure reflect a maternal lack, although of such a degree that one would hardly be dealing with a 'normal mother'.

Allergic reactions to foreign proteins in the mother's milk have occasionally been described and attempts made to discover the offending article in the mother's diet. These instances are most unusual and, in any case, difficult to prove.

Although, therefore, it can occur, it is extremely rare for the quality of a normal healthy mother's milk to be unsuitable for her healthy infant. The baby may fail to do well more commonly because of faulty feeding technique, or the ingestion of an insufficient quantity of milk.

Laboratory methods for analysing the constituents of milk are available, but these have little, if any clinical application. In exceptional instances an excess of fat in the milk may be suspected. A method of estimating this would be to stand the specimens of milk for a given period in special graduated tubes, noting the levels of cream registered.

AMPTELIKE AANKONDIGING

MEDIESE ASSISTENT-SEKRETARIS

Aansoeke deur tweetalige geneeshere word gevra vir die betrekking van Mediese Assistent-Sekretaris van die Mediese Vereniging van Suid-Afrika by sy Hoofkantoor in Kaapstad.

Die salarisskaal is £1,250 × 50—£1,500 plus lewenskostetoelae teen Regeringskaal (£208 per jaar vir getroude persone en £57 4s. vir ongetroudes).

Van die suksesvolle aansoeker sal verlang word dat hy by die Vereniging se pensioenskema aansluit.

Aansoeke moet gerig word aan die Mediese Sekretaris, Posbus 643, Kaapstad, en moet vergesel word van drie resente getuigskrifte. Sluitingsdatum vir die ontvangs van aansoeke 31 Augustus 1950.

OFFICIAL ANNOUNCEMENT

ASSISTANT MEDICAL SECRETARY

Applications are invited from bilingual medical practitioners for the post of Assistant Medical Secretary of the Medical Association of South Africa at its Head Office in Cape Town.

The Salary scale is £1,250 × 50—£1,500 plus cost-of-living allowance at Government rates (£208 per annum for married persons and £57 4s. for single persons).

The successful applicant will be required to subscribe to the Association's Pension Scheme.

Applications should be addressed to the Medical Secretary, P.O. Box 643, Cape Town, and should be accompanied by three recent testimonials. Closing date for the receipt of applications 31 August 1950.

REVIEWS OF BOOKS

MODERN TRENDS IN ORTHOPAEDICS

Modern Trends in Orthopaedics. Edited by Sir Harry Platt, M.D., M.S., F.R.C.S. (Pp. 497 + viii. With 222 illustrations. 49s. 6d.) Butterworth & Company (Africa) Limited, 1 Lincoln's Court, Masonic Grove, Durban. 1950.

Contents: 1. The Evolution and Scope of Modern Orthopaedics. 2. Fracture Treatment. 3. Tuberculosis of Bones and Joints. 4. Pyogenic Affections of Joints and Bones. 5. Congenital Dislocation of the Hip. 6. Congenital Deformities of the Spine and Limbs. 7. Chronic Arthritis. 8. Skeleton, Joint and Muscle Tumours. 9. Scoliosis. 10. Paralysis. 11. Injuries and Derangements of the Spinal Column. 12. Injuries of Muscles and Tendons. 13. Certain Vascular Lesions. 14. The Bone Dystrophies.

This book, edited by Sir Harry Platt and written by several authors, presents a panoramic view of what is, in the main, the outlook of the British orthopaedic surgeons. Many of the well-known fundamentals and sound principles are re-iterated and the way is sign-posted for future advances in the various branches of the subject. As Sir Harry Platt writes in the introduction: 'The modern orthopaedic surgeon though . . . concerned with deformity and its mechanical correction' equally with his predecessors, 'is, however, deeply interested in the genesis of deformity, and looks to an increasing knowledge of biophysical processes to supply him with the key to both the prevention and cure of contractures and joint stiffness in the early stages of crippling diseases and injuries'.

With these ideas in mind one gains much pleasure from reading this book which, by its very nature, provides more for the practising orthopaedic surgeon and post-graduate student than for the undergraduate student.

The chapter written by Mr. Jackson Burrows on *Bone Dystrophies* is a masterly exposition of a difficult and contentious subject. His classification clarifies many of the more obscure syndromes and tends to place them in a more logical relationship. This chapter in itself would render worthwhile the publication of this book.

Mr. Bryan McFarland's chapter on *Congenital Deformities of the Spine and Limbs* is written in his usual pithy manner. There are excellent skiagrams illustrating the calcaneo-navicular bridge as a cause of rigid flat foot, and the use of the tibial by-pass graft in congenital pseudarthrosis of the tibia. The latter has, of course, been described before by the author in an original contribution to the *British Journal of Surgery*.

All the other chapters are well worth reading and contain much information both recent and old. Space forbids each to be reviewed separately.

The book has been well produced and contains many excellent illustrations. There is also an extensive bibliography at the end of each chapter. This book is strongly recommended to all who are interested in orthopaedic surgery.

THE EYE AND ITS DISEASES

The Eye and Its Diseases. By 92 International Authorities. Edited by Conrad Berens, M.D., F.A.C.S. (Pp. 1092, with 436 figures, 8 in colour. 2nd ed. £6 16s.) Philadelphia and London: W. B. Saunders Company. 1949.

Contents: 1. Embryology, Anatomy and Postnatal Development of the Eye. 2. Physiology and Physiologic Optics. 3. Examination of the Eye. 4. Refraction and Accommodation. 5. Diseases of the Eye. 6. Medical Ophthalmology. 7. Movement of the Eyeballs and their Anomalies. 8. Injuries of the Eye. 9. The Eye and the Nervous System. 10. Treatment. 11. Preventive Ophthalmology. 12. Immunology. 13. Legal Aspects of Ophthalmology. 14. Laboratory Diagnosis.

When 92 of the world's most renowned ophthalmologists are invited to contribute to a volume on their subject, the reader is entitled to expect a textbook of the highest standard. Under Conrad Beren's editorship he is not disappointed; in fact, if any medical textbook is deserving of the highest praise, it is this one. Published and printed in the United States, its international flavour is immediately obvious. The list of contributors includes famous men from Spain, Switzerland, France and Great Brtiain, as well as American authors. As far as possible, the editor has confined each contributor to the section of the subject for which he is best known, e.g. J. H. Daggart on the Cornea, Troncoso on Gonioscopy, Ida Mann on Embryology and Developmental Anomalies, Marc Amsler on Operations on the Retina, to mention but a few.

If criticism of this book is to be offered, it can only take to task the unavoidable brevity of all the chapters. Of necessity the rarer conditions and lesser known operative procedures are only briefly mentioned or omitted completely, and it is felt that, since the volume is intended primarily for the practising ophthalmic surgeon and the post-graduate student, it would have been better to have expanded it to two or even three volumes. In mitigation of its present form, however, it should be stated that there is an adequate bibliography appended at the end of each chapter.

The Eye and Its Diseases was first published 15 years ago, and the latest edition has eliminated much of the older and now superfluous information and has substituted the latest trends in ophthalmology. Some chapters have been completely rewritten, others have been amended and altered, while treatment with the latest forms of chemotherapy (including streptomycin) has been substituted for some now outmoded forms of treatment.

The technical production of the book is beyond reproach and the illustrations are of the highest order.

One feels that this edition will receive the warm welcome from South African ophthalmologists which it so richly deserves.

PARKES WEBER'S RARE BIRDS

Further Rare Diseases and Debatable Subjects. Edited by F. Parkes Weber. (Pp. 236 + viii. 25s. With Figures Illustrating Cases.) London: Staples Press Limited. 1949.

Contents: 1. The Necrobiotic Nodules of Rheumatoid Arthritis. 2. A Case of Juvenile Rheumatoid Arthritis with Sclerodactylia and Calcinosis. 3. Sjögren's Disease. 4 Remarkable Syphilitic Cases. 5. Subcutaneous Fibroid Syphilomata. 6. Epicardial Nodules in a Case of Hodgkin's Disease. 7. An unusual Finding by Sternal Puncture in a Case of Acute Abdominal Hodgkin's Disease. 8. Amyloidosis associated with Myelomatosis. 9. Xanthomatosis, Heart Disease, Arterial Atheroma, Gallstones and Related Questions. 10. Acute Rapidly Fatal Myeloblastic Leukaemia, clinically resembling an Acute Febrile Infection. 11. Leukanaemia and Myelosclerosis. 12. Cerebello-Olivary Degeneration. 13. Encephalopathia Arteriolosclerotica Basalis Lethargica. 14. Acute Pulmonary Oedema with Hypoglycaemic Coma. 15. Paroxysmal Sensory Attacks. 16. Death while Bathing. 17. Ophthalmoscopic Sign of Death. 18. Note on Haemangiospasm, its Cause and Results. 19. Renal Angiospasm and Renal Cortical Necrosis. 20. Recurrent Menstrual Purpura and Vicarious Menstruation. 21. The Weber-Christian Disease, or Relapsing Febrile Nodular Non-Suppurative Panniculitis. 22. Idiopathic Extreme Osteoporosis, especially of the Spinal Column and Thoracic Cage, with Collapse of Front of Chest. 23. General and Local, Dysplastic or Dystrophic Excess or Lack—and Other Dysplasias—of the Subcutaneous Fat and Subcutaneous Tissue. 24. Combined Osseous and Dermal Dysplasias—Developmental Osteodermophthies. 25. A Familial Condition Resembling Clubbed Figures. 26. Dyschondroplasia (Ollier) of the Upper-Right Limb with Other Developmental Abnormalities. 27. A Note on Camptodactylia (Landouzy) and Dupuytren's Contraction. 28. Hypertrophic Osteopathy associated with Heart Disease. 29. Amyoplasia Congenita. 30. Hereditary Large Parietal Foramina, including remarks on Symmetrical Thinness of the Parietal Bones. 31. Congenital Vesicovaginal Fistula with Imperforate Hymen; Hydrops Foetalis and Erythroblastosis; Polydactyly. 32. Spontaneous Intra-uterine Inoculation of Melanoma from Mother to Foetus. 33. Cystic Lympho-epithelioma of the Thymus—Nervous and Other Clinical Symptoms in the Adult. 34. A Note on Haematospermia. 35. Carcinoma Telangiectaticum. 36. Periosteal Neurofibromatosis, with a short consideration of the whole subject of Neurofibromatosis. 37. Hepatomegalia Glycogenica. 38. Haemangiectatic Hypertrophy of Limbs, and Haemangiectatic Hemihypertrophy. 39. A Note on So-called Congenital Varicose Veins. 40. The Interpretation of Physical Happenings in the Body, by the Subconscious and by the Fully Conscious Brain. 41. Zest in Old Age. Index of Subjects.

Just as some of us collect stamps or coins or china ornaments, so has Dr. Parkes Weber been collecting rare cases in Medicine for the last 40 to 50 years. In this book, with the occasional help of other colleagues, he has marshalled for our entertainment and study 51 cases; and to those of us interested in rarities the book is invaluable.

Dr. Weber remarks that it is due to the exact study of single cases that our knowledge of many symptoms and syndromes was first due, and the intensive study of individual cases often brings to light the presence of associated syndromes and diseases.

Some of the cases described are not so rare that we have not seen them. In a note on haematospermia, a not altogether uncommon condition, he describes a case which presented, otherwise trouble free, for 30 years.

There are also interesting notes on sudden death due to bathing which, it is suggested, may follow the liberation of histamine in the tissues because of the action of cold water on specifically sensitive people. The possibility that histamine produced in large quantities is taken into the circulation with consequent sudden heart failure is discussed.

This is an interesting book and those who can remember Dr. Parkes in action at medical meetings on the subject of rare diseases will want to possess this volume

CROHN'S DISEASE

Regional Ileitis. By Burrill B. Crohn, M.D. (Pp. 229 + viii. With 74 figures. 30s.) London: Staples Press Limited. 1949.

Contents: 1. General Considerations. Scope of Study. 2. Regional Ileitis—Etiology (222 Cases). 3. Gross Pathology. 4. Clinical Features. 5. Fistula Formation in Regional Ileitis. 6. The Course in Regional Ileitis. 7. Complications of Regional Ileitis. 8. Roentgenographic Study of Regional Ileitis. 9. The Diagnosis of Regional Ileitis. 10. Considerations Regarding Therapy in Regional Ileitis. 11. Surgical Treatment of Chronic Regional Ileitis. 12. Acute Regional Ileitis. 13. Ileo-Jejunitis. 14. Ileo-Jejunitis—Treatment. 15. Ileo-Colitis—Combined Forms. References. Index

The author has modestly decided to write under the heading of regional ileitis rather than of Crohn's disease. There are instances where there is much to be said for eponymous titles, and this is one of them. The disease is not always situated in the ileum only; it may occur in the jejunum and even in the colon, and its etiology is obscure.

The author discusses the claims of sarcoidosis, protozoal infection, bacillary dysentery, virus infection, etc., in the causation, but concludes that none of them can be supported. The histological features of the non-caseating tubercle-like follicle in the absence of the bacillus of tuberculosis is, of course, like that of sarcoid; but the lesion is not found in cases of proved sarcoid, nor are the usual lesions of sarcoidosis found in cases of Crohn's disease. The virus of lymphogranuloma venereum is given serious consideration for several reasons, not least the tendency to fistula formation and the cicatrizing lesions. The sum total of evidence is against this as the cause. The relationship of this disease to chronic non-specific ulcerative colitis is discussed, and the conclusion is, as expected: they are different diseases.

The clinical description is accompanied by a number of excellent X-ray pictures of the condition. This work is the result of the personal study of just short of 300 cases. The difficult problem of treatment, and especially surgical treatment, is fully discussed.

PSYCHO-ANALYSIS

Psycho-Analysis: A Handbook for Medical Practitioners and Students of Comparative Psychology. By Edward Glover, M.D. (Pp. 367. 15s. Second edition, 1949.) England: Staples Press Limited.

Contents: 1. Theory of Psycho-Analysis. 2. Clinical Psycho-Analysis. 3. Practical Applications.

Those students or qualified men starting out for the first time to grasp an overall picture of the theory and practice of psycho-analysis will find this systematic account of the subject most useful.

The author is himself an enthusiastic exponent of Freudian psychology. He pays a great deal of attention to the connexion between the various stages of infantile organization and certain adult disorders of the mind.

The author takes pains to correlate the theory of psycho-analysis with psycho-analysis as applied in clinical practice. Thus the clinician interested in this form of therapy will find in these pages ample opportunity to obtain the necessary grounding in the structure and function of the normal mind before proceeding to master the methods of therapy.

The author makes no attempt to bolster the validity of psycho-analytical theories and controversial views are not included. He is merely presenting the reader interested in this subject with a comprehensive and authentic account.

THE HUMAN BODY

Medicine and Mankind. By Arnold Sorsby, M.D., F.R.C.S. (Pp. 232 with 36 figures. South African price: 15s. 9d. 2nd ed.) London and New York: Staples Press. 1950.

Contents: 1. Health and Disease. 2. Health. 3. Disease: The Ill-Formed Body. 5. Disease: The Abused Body. 6. Disease: The Assaulted Body. 7. Treatment: Individual Measures. 8. Treatment: Collective Measures. 9. Social Achievements and Social Frustrations. 10. On the Horizon of Time. Glossary. Index.

This is a very informative, well-written and interesting introduction to the functions of the human body. It should provide sufficient information to the numerous laymen who have a biological curiosity which inadequate instruction at school has failed to satisfy. The account of embryology and genetics is extremely well set out and forms the basis for understanding how the ill-formed body comes about.

The sound anatomical and physiological introduction in the first part of the book leads progressively to an understanding of the disorders which take place in function as well as structure and the final integration is a coherent account of the social measures to cope with the problems of treatment.

A particularly significant chapter is the one describing social frustrations. This brings the lay reader into touch with the medical profession's modern conception of the practice of the ancient art of medicine.

The book is well illustrated and it is one which our colleagues could well recommend to laymen as a very good introduction to human biology.

VITAMINS IN MEDICAL PRACTICE

The Vitamins in Medical Practice. By J. Safar, M.D., M.R.C.P., D.P.H. (Pp. 383. 25s.) London: Staples Press Limited.

Contents: 1. General and Introductory. 2. Vitamin A. 3. Vitamin 4. The Vitamin-B. Complex 5. Vitamin C. 6. Vitamin D. 7. Vitamin E. 8. Vitamin K. 9. Vitamin P. 10. Effects of Cooking, Canning and Fermentation on Vitamin Content of Foodstuffs. 11. Toxic and Pharmacological Aspects of the Vitamins. 12. Beriberi. 13. Pellagra. 14. Adult Scurvy. 15. Rickets. 16. Vitamin Nutrition in Infancy and Childhood. 17. The Vitamins in Pregnancy. 18. The Vitamins and the Oral Structures. 19. The Vitamins in Diseases of the Gastro-Intestinal Tract. 20 The Vitamins in Hepatic Physiology and Pathology. 21. The Vitamins in Haematology. 22. The Vitamins in Disorders of the Nervous System. 23. The Vitamins in Endocrinology. 24. The Vitamins in Cardiovascular Disease. 25. The Vitamins in Ophthalmology. 26. The Vitamins in Relation to Disorders of the Skin and Hair. 27. The Vitamins in Rheumatic Affections. 28. The Vitamins and Physical Fitness. 29. Some Aspects of Vitamins in Relation to Infection. 30. Sulphonamides and Vitamins.

This is not so much an account of personal experience as a review of the literature on vitamins. As such it is quite full, drawing on over 1,600 articles, culled chiefly from the British and American literature. The author presents a series of views and claims for and against certain roles played by vitamins, he himself adopting a rather passive attitude.

The book is broadly divided into three sections. The first deals briefly with each individual vitamin, its constitution, metabolism, requirements, distribution in nature, etc. In the second section the author presents clinical manifestations found in the various deficiency states. The third is an account of the role of vitamins in relation to the various systems of the body, e.g. skin, eyes, mouth, blood and to various conditions such as infancy, pregnancy, infections, and sulphonamide administration, etc.

That deficiencies are usually multiple, is stressed, and that even in such clear-cut pictures as those of beri-beri and pellagra, some of the features may be attributable to deficiency of other factors. Due note has to be taken of this in therapeutic measures. At the present time, when vitamins are being dispensed with the greatest abandon and little if any indication, the author emphasizes that administration of vitamins for their hypothetical tonic qualities is useless and unwarranted. In the addendum there is a preliminary report on vitamin B_{12}.

Those wishing to obtain a wider, rather than deeper, knowledge of the vitamins will find this book very useful indeed. It is very readable and the reader need not fear being involved in the complex subject of vitamin metabolism.

CORRESPONDENCE

FREUD AND SIN

To the Editor: Apropos my letter published in the issue of 10 June 1950, it is interesting to note how the mind of Dr. Sigmund Freud faced the question of fornication.

Consciously, he spoke in favour of fornication,[1] yet subconsciously his 'unconscious mind'[2] still appeared to realize that sex-immorality, like other crime, does not pay good dividends.

References from others of his writings showing that this was so, could be given,[3-6] but in the interests of brevity I shall confine myself to one example.

In his *Psychopathology of Everyday Life*,[7] in the sections *Forgetting of Proper Names* and *Forgetting of Foreign Words*, he quotes his own experience. He writes: 'In the example which I selected for analysis in 1898 I vainly strove to recall the name of the master who made the imposing frescoes of the "Last Judgment" in the dome of Orvieto. Instead of the lost name—Signorelli—two other names of artists—Botticelli and Boltraffio—obtruded themselves, names which my judgment immediately and definitely rejected as being incorrect' (pp. 4-5).

After some discussion in those two papers, Freud wrote the following footnote: 'I am *not* fully convinced of the lack of an inner connection between the two streams of thought in the case of "Signorelli". In carefully following the repressed thought concerning the theme of death and sexual life, one *does* strike an idea which shows a near relation to the theme of the frescoes of Orvieto' (p. 25).

Sigmund Freud, as those who have read his writings as well as various books on his life will know,[8] was the son of an orthodox Jewish father: but he himself was an atheist and denied in his writings[9-11] the beliefs that his father had held to be true.

Nevertheless, he had been nurtured in the orthodox Jewish way. He was conversant with much of the Old Testament, as well as (from later reading on his part) some of the New.

Jewish children of his generation were, I should say, as well grounded in the Torah and the Nebiim as are orthodox Jewish children of the present generation; while he would also have had more than a nodding acquaintance with the Kethubim—more particularly, perhaps, the sections Esther, Daniel, the Chronicles, the Psalms and the Proverbs of Solomon the son of David, king of Israel.

Using, therefore, Freud's own deductions that the memories of childhood are very important in their influence, through the 'unconscious' mind, on adult behaviour and thought, we can safely, using his own technique of association, deduce that it is possible that his 'subconscious' or 'pre-conscious plus unconscious' mind had retained the following:

'My son, if thou wilt receive my words, and hide my commandments with thee . . . then shalt thou understand the fear of the Lord, and find the knowledge of God. . . When wisdom entereth into thine heart, and knowledge is pleasant unto thine soul, discretion shall preserve thee, understanding shall keep thee . . . to deliver thee from the strange woman, even from the stranger which flattereth with her words; which forsaketh the guide of her youth, and forgetteth the covenant of her God. For her house inclineth unto death, and her *paths unto the dead*. None that go unto her return again, neither take they hold of the paths of life.'[12]

It is even possible, in view of Freud's wide reading, that his 'unconscious' or 'pre-conscious' mind held the memory of the following striking passages: 'Flee fornication. Every sin that a man doeth is without the body: but he that committeth fornication sinneth against his own body'; 'What! Know ye not that he which is joined to an harlot is one body? For two, saith He, shall be one flesh.'[13]

Freud himself wrote: 'When I analyse those cases of name-forgetting occurring in myself, I find almost regularly that the name witheld shows some relation to a theme which concerns my own person, and is apt to provoke in me strong and often painful emotions. . . The relation of the name to my person is an unexpected one, and is mostly brought about through superficial associations (words of double meaning and of similar sound)' (p. 38).[7]

In his own analysis Freud divides the three names as follows: 'Signor-elli:' 'Bo-ttic-elli:' 'Bo-l-traffio.' He emphasizes the first portion of each (p. 9).

The connecting link would appear to be the portion 'elli', which by sound-association could give either 'Eli' or 'Hell'; while the firmly-repressed portion is clearly 'Signor', which by sound-association could give 'Sig (mund)' and by interpretation-association could give 'Master', 'Mister' or 'Sir'.

The relationship of the 'Last Judgment' to the name 'Signorelli', in the 'unconscious' mind of Sigmund Freud, may, by the above most sketchy analysis, perhaps be brought into clearer perspective.

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30 June 1950.

WHY SMOKE?

To the Editor: In your issue of 24 June Dr. G. D. Reitz very ably sums up the effects of tobacco poisoning and he gives a formidable list of the evils which may result from the habit. I could add other items to that sad list. But his picture is grim enough. I shall limit myself to answering his question: Why Smoke?

All logical and scientific physicians should agree that his picture is substantially true. Actually they will not agree; men lose logic and science when they consider their own personal, emotional problems. For that reason physicians, cigarette in mouth, will continue to set a bad example to the mass of ignorant humanity who look to them for guidance.

For the tobacco habit is deeply woven into the emotional life of humanity. In war time great nations, fighting for their very existence, must devote part of their vital transport to tobacco. I saw the half-starving Germany of 1945. There, precious food could always be obtained for still more precious cigarettes. If Goethe had written Faust in 1945 he could have depicted the Devil tempting the learned Doctor with a packet of cigarettes; for nothing was too sacred to escape valuation in terms of tobacco, in the Götterdämerung of 1945.

In 24 years of medical practice I have advised many patients to renounce tobacco. Unless they were already within the shadow of death, none succeeded. Several put up a splendid fight but they all seemed to drift back in the end. Dixon Wright discussed the tobacco habit in relation to patients with Buerger's disease. They preferred to lose their limbs rather than their cigarettes. Eventually with all four limbs amputated, these trunks still managed to smoke. They were obliged to ask passing strangers to light cigarettes for them and to place the fatal toxin in their mouths. Against all this background Dr. Reitz' is a voice crying in the wilderness. In a hostile environment of toxin and trauma, malnutrition and micro-organism, Man always dies. For a number of years he struggles against these forces, but there is an ever-narrowing margin between him and the final precipice. Yet man deliberately increases the forces that are ranged against him. Consciously he adds to the number of those agents which force

him to his final doom. Opium we can understand; barbiturates sooth the sleepless; wine 'maketh glad the heart of man'. All these toxins give at least short-term rewards and wine has a strange association with history, beauty, romance.

But tobacco? What strange impulse drives man to compete for the burden of this dull poison, this chronic toxin? Study any victim of the habit: he offers you a cigarette and when you claim to be a non-smoker, 'Lucky man!' he says and immediately lights up gloomily but briskly. While absorbing his toxin he gives no sign of any pleasure. Every day at least a thousand million cigarettes are lit in this world; not once can a single smoker give a satisfactory reason for his action. It is certain that smokers as a class are no happier than non-smokers, apart from any question of physical health.

Psychologists have advanced the view that smoking is a substitute for sucking and that the victim, in practising his habit, reverts in his mood to the happy care-free days of his babyhood; but the act of smoking cannot be the essential factor because the chewing of tobacco is equally a habit; also, the Australian native has always been addicted to the chewing of a weed which in taste and appearance has nothing in common with tobacco, yet its essential constituent is nicotine. It seems that nicotine itself is sought by the addict. It may be that any strong drug, even if it causes no sense of exhilaration, gradually produces an internal environment which the victim comes to recognize as his norm. The slave grows to like his chains and comes to feel uneasy without them. This, too, may be the explanation of the arsenic eating to which the Styrian mountaineers are addicted. Whatever explanation is accepted, little can be put to the credit side of smoking and much to its debit. How does this strange habit come to be foisted on suffering humanity? A boy smokes because his elders do so and vaguely he feels that it will bring him the stamp of manhood. Such misconceptions are ruthlessly exploited by modern commercialism. I saw an advertisement to-day: 'Be a man and smoke " . . . ", the cigarette for men.'

Young men smoke for an exactly opposite reason. They are convinced of their manhood. The grand illusion of their manhood strength is a reality to them. They are keen to test it even against the toxins of alcohol and tobacco. It is true that youth seems to emerge laughingly triumphant from such trials of strength, but the struggle with these toxins is prolonged, as a habit, into middle age. At this stage the toxins win.

Similarly girls in their teens, shy and awkward in their social contacts, are led to believe that smoking is the hallmark of the sophisticated elegant society woman. Again ruthless commercial firms are quick to emphasize this idea in their advertising: a young girl is depicted at her first dance, lighting up a particular brand of cigarette, for 'The pause that's brief'.

How can we free mankind from this ensnarement with this toxic weed? From the lips of the girl that types these lines smoke is pouring. The hands of the printer who sets up these words will be stained with nicotine. The physician who reads this letter will smile at it through clouds of smoke. Suffering Humanity, how can you ever escape from your bondage to nicotine?

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4 July 1950.

Futile Radiological Procedures

To the Editor: During the recent Medical Congress in Cape Town, in the course of a paper delivered by an E.N.T. Specialist, the difficulties of radiology of the sinuses were demonstrated, by comparison of radiographs of 'dry' and 'wet' skulls, and the fallacies of even the very best radiographs were proved clinically. How then can any radiologist even venture to give an opinion on the presence or absence of sinus pathology merely by screening?

I am really astounded at the attitude adopted by Drs. H. Hirschson and J. N. Jacobson. Surely they must agree with Dr. V. Berman in his strictures, instead of deriding him to the extent of taking a passage out of its context in a textbook, and making this their excuse for a practice which is without any doubt a useless procedure.

I have been a practitioner for 30 years. Before radiology became the science of experts, which it undoubtedly is to-day, I considered myself as having a fair knowledge of the subject and, in fact, acted as radiologist for several years in a fairly large hospital. I cannot but feel that the present controversy is but a pampering of the specialist to the demands of the clinician. Can any radiologist deny how often he has squirmed under the lash of the clinician, who is 'on the 'phone' waiting for a report on a radiograph when the diagnosis has to be given by reading a wet plate, which diagnosis the radiologist knows full well may be quite incorrect?

As for 'Clinician', my advice would be for him to keep out of the argument. Of course it is by the correlation of clinical signs and symptoms and radiological findings that correct diagnoses are made, and in that manner the clinician has the last word. But how often, unfortunately, does not the clinician consider himself as having the last word in the reading of a radiograph?

'G. P.'

11 July 1950.

Radiological Case Book XXVIII

To the Editor: It is most regrettable that *Radiological Case Book*: *XXVIII* in the issue of 24 June should have emanated from the Radiological Department of a large teaching hospital, as it is misleading and unscientific in the extreme.

Fig. 1 instantly shows itself to be a cholecystogram of a partially filled gall bladder containing numerous hypertrophied folds of mucous membrane. A radiographic record of this condition is sufficiently rare and interesting to have been recorded as such.

On reading the letterpress, however, one finds it emphatically stated no fewer than half a dozen times that the illustrations are typical of a gall bladder containing numerous translucent gallstones. They are not typical of any such thing!

Fig. 2, I think should be disregarded altogether, as something appears to have gone wrong with it.

The cholecystogram illustrated in the report presents a linear or irregularly striated pattern and the marginal radiolucencies have their apices, which are mostly sharp, pointing away from the bladder wall and towards its centre. The medial wall shows several obtuse angles or ledges, which can only be present in a partially collapsed gall bladder and which are continuous with hypertrophied folds of mucous membrane in the linear pattern. The large radiolucent area extending right across the gall bladder is caused by compressing a half empty, flaccid, rugose bladder against a distended flatulent hepatic flexure. The remainder of the report is characterized by sins of omission.

1. Why is there no report on, or radiogram of, the effects of a fatty meal?

2. Why is there no report by the surgeon or pathologist on the macroscopic appearance of the mucous membrane—size and bore of cystic duct, etc.?

3. Why no information about the taking of homeopathic medicines before the cholecystography? Very important, in the circumstances!

4. Why is the woman's statement that she passed the stones not elaborated? Did she have severe attacks of gall-stone colic with pain; did she require morphine; was she laid up in bed or did she by any chance pass the famous goat-dung faeces?

Remarkable woman, to have decided to enter hospital for an operation after passing about 70 gall stones, and long ones mark you, all within the space of a fortnight. The submission that this gall bladder was distended and blocked by a stone in the cystic duct is incorrect according to the illustration reproduced; and that it contained calcium, not proven.

It is far more likely to be a cholecystogram produced by the author of *Radiological Case Book*: *XXVIII*, in collaboration with an unknown homeopath (who gave the halogen) and perhaps a relative of the patient (who gave agarol containing the phenolpthalein).

F. W. R.

12 July 1950.